CONSTRUCTION NEWS

PERSONALS, ENGINEERING SOCIETIES, INDUSTRIAL NOTES, TRADE PUBLICATIONS.

Supplement to ENGINEERING NEWS. Thursday, January 1, 1903

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PERSONAL.

Messrs. Frank Rice and W. S. Duncan have been elected Water Commissioners of Atlanta, Ga.

Mr. S. P. Cowardin, Civil Engineer of the Richmond (Va.) Passenger & Power Co., has resigned.

Mr. Louis Legat has taken a position as Engineer of the Locomotive & Machine Co. of Montreal, Que.

Mr. J. A. Vaillancourt has resigned his position as Manager of the Berlin Water Co., of Berlin, N. H.

Mr. W. S. Greene, of Savannah, Ga., has been appointed Receiver of the Columbus Water-Works Co., of Columbus, Ga.

Mr. S. P. Hutchinson has been appointed Assistant General Superintendent of the Michigan Central R. R. at Detroit, Mich.

Mr. Frederick W. Ruckstuhl has resigned the office of Chief of Sulpture of the Louisiana Purchase Exposition, at St. Louis, 1904.

Mr. C. C. Ewing has been appointed Superintendent of the water-works of East Liverpool, O., succeeding Mr. B. Perkins, resigned.

Mr. Joseph A. Duffy, of New York, has been appointed Receiver of the New Paltz & Poughkeepsie Traction Co., Poughkeepsie, N. Y.

Mr. Lilburn T. Myers, Vice-President, has been appointed Receiver of the William R. Trigg Shipbuilding Co., of Richmond, Va.

Mr. E. von der Osten, Chief Engineer of the Engineering Department of the United States Garbage Reduction Co., Lynn, Mass., has resigned.

Mr. John P. Congdon, heretofore Acting Division Engineer of the Idaho Division of the Oregon Short Line R. R., has been appointed Division Engineer.

Mr. B. F. Dickson, Superintendent of Maintenance of Way of the Kansas City Southern Ry., succeeds Mr. J. A. Edson, resigned, as General Manager of that road.

Mr. B. J. Dalton, of Lawrence, Kan., was appointed Chief Engineer of the Cherryvale, Oklahoma & Texas Ry. on Dec. 18. The company's offices are at Caney, Kan.

Mr. C. S. Hayden, Superintendent of the Birmingham Division of the Southern Ry., has been appointed Superintendent of Construction of the Tennessee Central Ry.

Mr. Gardiner C. Sims, formerly Superintendent of the J. C. Hoadley Engine Works, at Lawrence, Mass., has been appointed Police Commissioner of Providence, R. I.

Mr. Joseph Agramonte, C. E., who has been Principal Assistant Engineer of the Province of Havana, has been appointed Chief Engineer of the Province of Santa Clara, Cuba.

Mr. D. Hardy, formerly Superintendent of the Denver & Rio Grande Ry. at Salida, Colo., has been appointed Superintendent of the First Division, with headquarters at Pueblo, Colo.

Mr. Geo. E. Thomas, M. Am. Soc. C. E., has been appointed General Superintendent of Construction of the power house at 59th St. and the North River, New York, for the Rapid Transit Ry.

Mr. J. A. Edson, General Manager of the Kansas City Southern Ry., will succeed Mr. J. M. Herbert as Manager of the Denver & Rio Grande, the Rio Grande Southern and the Rio Grande Western roads.

Mr. Lemuel S. Boggs, formerly on the engineering staff of the firm of Sargent & Lundy, of Chicago, has been appointed Manager of the Boston & Great Falls Light & Power Co. and the Great Falls St. Ry. Co., of Great Falls, Mont.

Mr. C. T. Herring has been elected First Vice-President of the Blackwell, Enid & Texas R. R., Mr. Seeley Dunn Second Vice-President and General Manager, and Mr. L. G. Hawkins Secretary and Treasurer.

The Rogers Universal Cost System has removed its offices from Keene, N. H., to Bantam, Conn., and will hereafter be known as The Industrial Timekeeping and Cost System.

Mr. James M. Herbert has resigned as Manager of the Denver & Rio Grande, the Rio Grande Southern and Rio Grande Western roads, and will become Vice-President and General Manager of the Colorado & Southern Ry.

Mr. O. W. Bain, Electrical Engineer, representing the tramways system of the New South Wales Government, arrived in Pittsburg, Pa., on Dec. 24, on a business visit to the Westinghouse Electric Mfg. Co., with which company he will place some large contracts for electrical equipment.

The Engineers' Club of Cincinnati (O.) elected the following officers on Dec. 18 for the year 1903: Mr. A. O. Elzner, President; Mr. H. E. Warrington, Vice-President; Mr. J. F. Wilson, Secretary and Treasurer, and Messrs. Chas. H. Meeds, Frank E. Morris and James A. Stewart, Directors.

Mr. Frank E. Ward, General Superintendent of the Great Northern Ry., it is reported, will go to the Chicago, Burlington & Quincy R. R. as General Manager. Mr. Ward will be succeeded by Mr. George T. Slade, of the Erie R. R. Mr. F. A. Delano is now General Manager of the Burlington system.

Mr. A. Kennedy Ashworth, formerly of the firm of D. Ashworth & Son, Consulting Steam Engineers, and later for a number of years in charge of the Engineering Department of the Pittsburg Gage & Supply Co., Pittsburg, has accepted the position of Assistant Manager of the Underfeed Stoker Co., with headquarters in the Marquette Building, Chicago.

Mr. J. F. Deems, General Superintendent of the Schenectady Branch of the American Locomotive Co., has been appointed General Superintendent of Motive Power, Rolling Stock and Machinery of the New York Central & Hudson River R. R., with headquarters in New York City. Mr. Deems is about 46 years of age, and is a graduate of the Southern Institute of Pennsylvania.

Mr. E. C. Noe has been appointed General Superintendent of the Northwestern & Lake St. Elevated Rys., of Chicago, to succeed Mr. Frank Hedley, who has resigned to become General Superintendent of the underground lines of the Interborough Rapid Transit Co. of New York. Mr. Noe began work in the electrical field with the Chicago Edison Co., and at the time of his appointment he was Chief Engineer of the Chicago office of the General Electric Co.

Mr. Myron Jay Carpenter, President of the Chicago & Eastern Illinois R. R., has resigned to accept the position of Vice-President and General Manager of the Pere Marquette R. R. Mr. Carpenter has been President of the Chicago & Eastern Illinois R. R. for the past 10 years. He was born in Caledonia, Ill., in 1850, and entered railway service as an operator on the Chicago, Milwaukee & St. Paul Ry. Prior to becoming President of the Chicago & Eastern Illinois road, he was General Manager and later President of the Duluth & Iron Range road.

Gen. Francis V. Greene, M. Am. Soc. C. E., formerly for many years President of the Barber Asphalt Paving Co., has been appointed by Mayor Low, of New York, Police Commissioner, to succeed Col. Partridge, resigned. Gen. Greene is graduate of the U. S. Military Academy, class of 1870, and after serving in the army for a number of years, resigned to enter business as a civil engineer. During 1879-80 he was Engineer-in-charge of Public Roads in Washington, D. C., and in 1885 was Professor of Practical Military Engineering at the U. S. Military Academy.

Mr. Jeme Tin Yow, a graduate of the Sheffield Scientific School of Yale University, class of '81, is now one of the chief engineers of the Imperial Railway of China. At the time the Newchang section of the road was turned over to China by the Russians Mr. Jeme was appointed Viceroy of Chili Province to receive the line from the Russians and also to take charge of the engineering of that division, as well as the operation of the road. Mr. Jeme has now been appointed Engineer for the construction of the new branch line, about 30 miles in length, running to the Imperial Western Tomb.

OBITUARY.

Mr. Amos. L. Mason, Contractor, died at his home in Syracuse, N. Y., on Dec. 29, aged 78 years.

Mr. H. M. Stanley, an American Mining Engineer, died at Mexico City, Mex., on Dec. 19, aged 48 years.

Mr. J. Archer Millett, for the past 35 years connected with the White, Potter & Paige Mfg. Co., New York, died at his home in Brooklyn, N. Y., of pneumonia last week.

Mr. Olaf Helwig, Civil Engineer, Assistant Engineer at the League Island Navy Yard, Philadelphia, Pa., died in that city on Dec. 26.

Capt. Robert McGregor, Corps of Engineers, U. S. A., died in the Manila Hospital on Dec. 23 of acute appendicitis. Capt. McGregor was a native of Michigan, and was graduated from the U. S. Military in 1889.

Mr. Edward S. Waters, Hydraulic and Civil Engineer, died at his home in Holyoke, Mass., last week, at the age of 71 years. Mr. Waters was at the time of his death Treasurer of the Holyoke Water Power Co.

Mr. Thomas Bradford, Civil Engineer, a former resident of Beaver county, Pa., died on Dec. 21 in Detroit, Mich., where he had gone for his health. Mr. Bradford was a graduate of the Rensselaer Polytechnic Institute of Troy, N. Y., and was for many years connected with the Pennsylvania R. R.

Mr. Edward B. McLean, Manager of the Newark, N. J., office of the Sterling Meeker Co., dealers in railroad supplies, was killed in an elevator shaft in an office building in New York City on Dec. 26. Mr. McLean was 45 years of age, and was Secretary of the Christopher & Tenth St. R. R. until the purchase of that road by the Metropolitan system.

ENGINEERING SOCIETIES.

COMING MEETINGS.

PACIFIC NORTHWEST SOCIETY OF ENGINEERS.
Jan. 3, 1903. Annual meeting at Seattle, Wash. Secy., G. F. Cotterill, Seattle, Wash.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Jan. 8. Annual meeting at Pittsburg, Pa. Secy., C. W. Ridinger.

LOUISIANA ENGINEERING SOCIETY.
Jan. 10, 1903. Annual meeting at New Orleans, La. Secy., G. W. Lawes, New Orleans, La.

NEW ENGLAND WATER-WORKS ASSOCIATION.
Jan. 14. Annual meeting at Boston, Mass. Secy., Willard Kent, Narragansett Pier, R. I.

MICHIGAN ENGINEERING SOCIETY.
Jan. 20, 21 and 22, 1903. Annual meeting at Battle Creek, Mich. Secy., F. Hodgman, Climax, Mich.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Jan. 21, 22, 1903. Annual meeting at New York city. Secy., C. W. Hunt, 220 W. 57th St., New York.

ILLINOIS SOCIETY OF ENGINEERS AND SURVEYORS.
Jan. 21, 23. Annual meeting at Aurora, Ill. Secy., A. L. Kuehn, Champaign, Ill.

OHIO SOCIETY OF SURVEYORS AND CIVIL ENGINEERS.
Jan. 20, 21, 1903. Annual meeting at Columbus, O. Secy., W. H. Boughton, Granville, O.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Jan. 27, 28, 29, 1903. Annual meeting at Montreal, Canada. Secy., C. H. McLeod, Montreal.

DETROIT ENGINEERING SOCIETY.—The regular December meeting was held at the Hotel Ste. Claire on the evening of Dec. 26. Mr. W. C. King read a paper on "The Detroit Sewer System." An informal dinner preceded the meeting.—Secy., C. W. Hubbell.

INTERSTATE INDEPENDENT TELEPHONE ASSOCIATION.—The following officers were elected at the annual meeting, held at Chicago, Ill., on Dec. 9, 10 and 11, 1902: President, Mr. C. E. Hull, of Salem, Ill.; Vice-President, Mr. L. A. Frazee, of Connersville, Ind.; Secretary, Mr. E. M. Coleman, of Louisville, Ky.; Treasurer, Mr. J. W. Layne, of Carthage, Mo.

ENGINEERS' CLUB OF ST. LOUIS.—At the meeting of Dec. 3, held at the rooms of the club at 700 Pine St., a number of business matters, such as the presentation of reports of officers and standing committees, came up for consideration. It was announced that the executive committee had approved the report of the special committee on prizes for the past year; accordingly, the annual prize was awarded to Mr. H. H. Humphrey for his paper, "Notes on the Use of Beaumont Oil as Fuel," read before the club on April 2, 1902. The annual banquet of the club was held on Dec 17; the election of officers took place on this occasion; the full result of the election will be given in our next issue.—Secy., H. J. Pfeifer.

ENGINEERS' CLUB OF PHILADELPHIA.—The second regular meeting of December was held on Dec. 20, President H. J. Hartley in the chair. The subject of the evening was "The Manufacture of Portland Cement from Marl and Clay," on which subject Mr. H. S. Spackman presented an illustrated paper. The author described the natural deposits of marl and clay, and explained the wet process of manufacturing cement. Messrs. H. T. Grantham, Jas. Christie, E. M. Nichols, R. L. Humphrey and others spoke in discussion. For the next meeting of the club, to be held on the evening of Jan. 3, 1903, a paper by Mr. Chas. Piez on "The Handling and Storage of Iron Ore" is on the program.—Secy., L. F. Rondinella.

AMERICAN ROENTGEN RAY SOCIETY.—The annual convention of this society was held at the Sherman House, Chicago, on Dec. 10 and 11, 1902. Four sessions were held

and a large number of papers was presented, with subjects and authors as follows: "X-ray Physics," by Mr. T. P. Hall; "Systematic Records and the Routine Use of X-rays," by Dr. M. J. Wilbert; "Treating Epithelioma with X-rays," by Mr. E. H. Gruber; "The Treatment of Cancer, Tuberculosis, Rodent Ulcer and Lupus," by Dr. G. Girdwood; "Instantaneous Skiagraphy," by Dr. M. R. Casabian; "Equi-potential Surfaces in X-ray Fields; their Production and Utilization," by Dr. J. C. Pitkin; "Skiagraphy as an Art," by Mr. J. R. Glcinsky; "Diagnosis of Calculi by X-rays," by Dr. R. H. Boggs; "The Roentgen Ray as a Therapeutic Force," by Dr. J. B. Murphy; "The Result of Treatment of Guinea Pigs affected with Tuberculosis by High-Frequency Currents," by Drs. G. P. Girdwood and C. Higgins; "The Technique of X-ray Therapy," by Dr. H. P. Pratt; "Radiotherapy in Pulmonary Tuberculosis," by Dr. G. G. Burdick; "The Technique of Treatment of Malignant Growths," by Dr. J. N. Scott; "X-ray Treatment in Intra-abdominal and other deeply located Malignant Growths," by Dr. C. E. Skinner. The secretary of the society is Dr. J. B. Bullitt, of Louisville, Ky.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Jan. 1.	Irrigation system,	San Saba, Tex.	Dec. 4
Jan. 2.	Pumping engine,	Kansas City, Mo.	Dec. 11
	Advertised, Eng. News, Dec. 11 to Jan. 1.		
Jan. 2.	Buildings, (3),	Boston, Mass.	Dec. 4
	Advertised, Eng. News, Dec. 4 to Jan. 1.		
Jan. 2.	Trunk sewer,	Cincinnati, O.	Dec. 18
Jan. 2.	Portland cement,	New York, N. Y.	Dec. 25
Jan. 2.	Breakwater,	Ottawa, Ont.	Dec. 25
Jan. 2.	Water mains,	South Brooklyn, O.	Dec. 25
Jan. 2.	Wharf,	Ottawa, Ont.	Dec. 25
Jan. 3.	Elec. light and water supply,	Abilene, Tex.	Dec. 25
Jan. 3.	Steel tank,	Pomona, Cal.	Dec. 18
Jan. 3.	Court house,	Warren, Ark.	Dec. 18
Jan. 3.	Dredging, etc.,	Richmond, Va.	Dec. 4
	Advertised, Eng. News, Dec. 4 to Jan. 1.		
Jan. 3.	Street railway,	New Haven, Conn.	Dec. 25
	Advertised, Eng. News, Dec. 25.		
Jan. 3.	Elevator,	Helena, Mont.	Dec. 11
Jan. 3.	Centrifugal pump,	Portland, Ore.	Jan. 1
Jan. 5.	Dredging,	Boston, Mass.	Dec. 4
Jan. 5.	Bridges (7),	Cumberland, Md.	Nov. 27
Jan. 5.	Sewer system,	Lawton, Okla. Ter.	Dec. 11
	Advertised, Eng. News, Dec. 11 and 18.		
Jan. 5.	Electric light plant,	Winona, Minn.	Dec. 18
	Advertised, Eng. News, Dec. 18 and 25.		
Jan. 5.	Paving,	Toledo, O.	Dec. 18
Jan. 5.	Bridges,	Montezuma, Ia.	Dec. 18
Jan. 5.	Electric light plant,	Winona, Minn.	Dec. 18
	Advertised, Eng. News, Dec. 18 and 25.		
Jan. 5.	Water pump,	Los Angeles, Cal.	Dec. 25
Jan. 5.	Office building,	Montreal, Que.	Dec. 25
Jan. 5.	Bridge,	Oshkosh, Wis.	Jan. 1
Jan. 5.	Pile bridge work,	Waterloo, Ia.	Jan. 1
Jan. 5.	Bridges,	Anadarko, Okla. Ter.	Jan. 1
Jan. 5.	Submarine cable,	New York, N. Y.	Jan. 1
Jan. 5.	School, etc.,	New York, N. Y.	Jan. 1
Jan. 5.	Sewer,	Bloomfield, N. J.	Jan. 1
Jan. 5.	Spillway lengthening,	Des Moines, Ia.	Jan. 1
Jan. 5.	Paving,	Orange, N. J.	Jan. 1
Jan. 6.	Bridge,	Brookville, Ind.	Jan. 1
Jan. 6.	Bridge work,	Grundy Center, Ia.	Jan. 1
Jan. 6.	City hall and jail,	Lake Charles, La.	Dec. 25
Jan. 6.	Bridge,	Sacramento, Cal.	Dec. 25
Jan. 6.	Buildings,	Port Townsend, Wash.	Dec. 18
Jan. 6.	Paving,	Cleveland, O.	Dec. 18
Jan. 6.	Water-works,	Ardmore, Ind. Ter.	Dec. 18
	Advertised, Eng. News, Dec. 18 to Jan. 8.		
Jan. 6.	Sewer work,	New Britain, Conn.	Dec. 18
	Advertised, Eng. News, Dec. 18 and 25.		
Jan. 6.	Bridges (2),	Bloomfield, Ind.	Dec. 18
Jan. 6.	Ash elevator,	St. Louis, Mo.	Dec. 4
	Advertised, Eng. News, Dec. 4 and 11.		
Jan. 6.	Bridge,	Stockton, Cal.	Dec. 11
Jan. 6.	Sewers,	Columbus, O.	Dec. 11
	Advertised, Eng. News, Dec. 11 to Jan. 8.		
Jan. 6.	Cruisers (2),	Washington, D. C.	Dec. 11
Jan. 7.	Bridge,	Webster, S. Dak.	Dec. 11
Jan. 7.	Bridge,	Colfax, Wash.	Dec. 11
Jan. 7.	Sewer system,	Fernandina, Fla.	Dec. 11
	Advertised, Eng. News, Dec. 11 to Jan. 1.		
Jan. 7.	Water-works,	Centerville, Miss.	Dec. 18
	Advertised, Eng. News, Dec. 18 to Jan. 8.		
Jan. 7.	Bridges (2),	Olivet, S. Dak.	Dec. 18
Jan. 7.	Drain pipe,	Merced, Cal.	Dec. 25
Jan. 7.	Grading,	Brooklyn, N. Y.	Jan. 1
Jan. 7.	Gun forgings,	Washington, D. C.	Jan. 1
Jan. 7.	Meters,	Baltimore, Md.	Jan. 1
Jan. 8.	Pavilion and park work,	New York, N. Y.	Jan. 1
Jan. 8.	Alterations to buildings,	New York, N. Y.	Jan. 1
Jan. 8.	Sewers,	Fort Wayne, Ind.	Jan. 1
Jan. 8.	Electric railway franchise,	Oroville, Cal.	Dec. 18
Jan. 8.	Metal work,	Mobile, Ala.	Dec. 4
	Advertised, Eng. News, Dec. 4 and 11.		
Jan. 8.	Light-house station,	Mobile, Ala.	Dec. 4
	Advertised, Eng. News, Dec. 4 and 11.		
Jan. 8.	Pneumatic mail service,	Chicago, Ill.	Dec. 4
Jan. 8.	Drainage work,	Walnut, Ill.	Jan. 1
	Advertised, Eng. News, Jan. 1.		
Jan. 9.	Light-house station,	Portland, Ore.	Dec. 25
Jan. 10.	Wharf,	Sturgeon, Falls, Ont.	Dec. 25
Jan. 10.	Water-works, electric l'ts,	N. Orleans, La.	Dec. 18
Jan. 10.	Steam propeller,	Washington, D. C.	Dec. 18
Jan. 10.	Road work,	Fort Myer, Va.	Dec. 18
Jan. 10.	Bridge,	Waycross, Ga.	Jan. 1
Jan. 10.	Road work,	Fort Myer, Va.	Jan. 1
Jan. 12.	Church,	Chepstow, Ont.	Dec. 11
Jan. 12.	Pier extension, etc.,	Duluth, Minn.	Dec. 18
	Advertised, Eng. News, Dec. 18 to Jan. 15.		
Jan. 12.	Bridge,	Tacoma, Wash.	Dec. 18
Jan. 12.	School,	Marion, O.	Dec. 25
Jan. 12.	Viaduct	Scranton, Pa.	Dec. 25
Jan. 12.	Gas lighting,	New York, N. Y.	Jan. 1
Jan. 14.	Sewers,	Brooklyn, N. Y.	Jan. 1
Jan. 14.	Foundations,	New York, N. Y.	Jan. 1
Jan. 14.	Courthouse,	Hickman, Ky.	Dec. 25
Jan. 14.	Sewerage system,	Valladolid, Spain.	Nov. 27
Jan. 14.	Dredging,	Chicago, Ill.	Nov. 20
Jan. 14.	Wiring system (bldgs.),	Helena, Mont.	Dec. 18
Jan. 14.	Towboat, etc.,	Memphis, Tenn.	Dec. 18
	Advertised, Eng. News, Dec. 18 and 25.		
Jan. 14.	Hospital building,	Fresno, Cal.	Dec. 25
Jan. 14.	Court house,	Louisville, Ky.	Jan. 1
Jan. 15.	Jetty,	Los Angeles, Cal.	Jan. 1
Jan. 15.	Road work,	Fort Collins, Colo.	Jan. 1
Jan. 15.	Library,	Rockland, Me.	Jan. 1
Jan. 15.	Paving,	Washington, Ia.	Jan. 1
Jan. 15.	Water-works,	Fort Snelling, Minn.	Jan. 1
Jan. 15.	Artesian well,	San Antonio, Tex.	Jan. 1
Jan. 15.	Jetties,	Newport, R. I.	Dec. 25
	Advertised, Eng. News, Dec. 25 to Jan. 22.		
Jan. 15.	Dormitory,	Salem, Ore.	Dec. 25
Jan. 15.	Pier extension,	Duluth, Minn.	Dec. 18
	Advertised, Eng. News, Dec. 18 to Jan. 15.		
Jan. 15.	Steel hull, etc.,	Washington, D. C.	Nov. 27
Jan. 15.	P. O. building,	Nolfolk, Neb.	Dec. 4
	Advertised, Eng. News, Dec. 4 and 11.		
Jan. 16.	Artesian well,	Georgetown, S. C.	Jan. 1
Jan. 17.	Bridges,	Hanoi, French Indo-China	Oct. 30
Jan. 17.	Wharf,	Washington, D. C.	Dec. 25
Jan. 17.	Railway,	Beckley, W. Va.	Dec. 25
	Advertised, Eng. News, Dec. 25 to Jan. 15.		
Jan. 19.	Jail, etc.,	Marion, Ind.	Jan. 1
Jan. 20.	Outlet ditch, etc., (w.-w.),	Evans, Colo.	Jan. 1
Jan. 20.	School house,	Bloomer, Wis.	Jan. 1
Jan. 22.	Dredging,	Boston, Mass.	Dec. 18
	Advertised, Eng. News, Dec. 18-25, Jan. 8-15.		
Jan. 22.	Hospital,	Chattanooga, Tenn.	Dec. 25
	Advertised, Eng. News, Dec. 25 to Jan. 22.		
Jan. 22.	Excavation,	Buffalo, N. Y.	Dec. 25
	Advertised, Eng. News, Dec. 25 to Jan. 22.		
Jan. 25.	Breakwater,	Tiverton, N. S.	Dec. 25
Jan. 26.	Ventilating system,	Chicago, Ill.	Dec. 25
	Advertised, Eng. News, Dec. 25 to Jan. 22.		
Jan. 26.	Building plans,	Lincoln, Ill.	Jan. 1
Jan. 26.	Dredging,	St. Augustine, Fla.	Jan. 1
	Advertised, Eng. News, Jan. 1 to 29.		
Jan. 27.	Steam heating apparatus,	Washington, D.C.	Jan. 1
	Advertised, Eng. News, Jan. 1 and 8.		
Jan. 27.	Street construction, etc.,	Cape Town, S.Af.	Nov. 27
Jan. 28.	Water filter, etc.,	Washington, D. C.	Jan. 1
	Advertised, Eng. News, Jan. 1 to 29.		
Jan. 29.	Bulkhead,	Philadelphia, Pa.	Jan. 1
	Advertised, Eng. News, Jan. 1 to 29.		
Jan. 30.	Breakwater,	Newport, R. I.	Jan. 1
	Advertised, Eng. News, Jan. 1 to 29.		
Jan. 30.	Library,	Geneseo, N. Y.	Dec. 25
Jan. 31.	Town hall,	Hull, Eng.	Nov. 20
Jan. 31.	Exposition buildings,	Brussels, Belgium,	Oct. 30
Feb. 1.	Water-works, electric plant,	Searcy, Ark.	Dec. 25
Feb. 1.	School,	Scranton, Pa.	Dec. 18
Feb. 1.	Church,	Northampton, Mass.	Dec. 11
Feb. 1.	Bridge,	Jacksonville, Fla.	Jan. 1
	Advertised, Eng. News, Jan. 1.		
Feb. 2.	City hall and market house,	Houston, Tex.	Dec. 11
Feb. 2.	Sewers,	New Orleans, La.	Nov. 27
	Advertised, Eng. News, Nov. 27 to Feb. 5.		
Feb. 3.	Buildings,	Washington, D. C.	Jan. 1
Feb. 15.	Reservoir,	New Britain, Conn.	Dec. 4
Feb. 16.	Paving,	Fond du Lac, Wis.	Dec. 25
Feb. 26.	Electric railway,	Bulawayo, So. Africa	Nov. 27
Feb. 28.	Dredging,	Bridgewater, Eng.	Nov. 20
Mar. 4.	St. ry. and power plants,	Manila, P. I.	Nov. 13
March 14.	Steel dry-dock,	Cavite, P. I.	Jan. 1
No date.	Piping (Misc. C.),	Raubsville, Pa.	Jan. 1
"	Railway (Ohio),	Cincinnati, O.	Dec. 18
	Advertised, Eng. News, Dec. 18, 25, Jan. 1.		

RAILWAYS.

(For foreign railways see under "Foreign Contracts and Export News.")

ANADARKO & ENID.—The secretary of Oklahoma has been applied to for permission to extend this line from Waurika to Ardmore Ind. Ter., a distance of about 50 miles. Ivan G. Conkling is Pres., and F. C. Marshall, Secy.; either may be addressed care M. A. Lowe, Topeka, Kan.

ARKANSAS.—The following is a list of the railways incorporated in Arkansas during the past year, giving projected length, route, capital stock and the names of some of those interested in the respective roads:

Morning Star Ry., 125 miles in length, from Yellville, Ark., to Newport; estimated cost, $3,000,000; amount of capital stock subscribed, $240,000; Calip H. Jackson, Geo. H. Heafford, W. L. Johnson, Chicago, and Theo. Rockenfeller, Streator, Ill.

Southern Missouri & Arkansas, 80 miles, from Newport in a northerly direction to the State line. This line transferred its charter to the St. Louis, Memphis & Southeastern Railroad Company on February 2, 1901. Capital stock, $1,000,000. Newman Erb, New York, owns a majority of the stock.

Danville, Fourche Valley & Southern, 15 miles from Danville, Yell county to Cobb's in a southwesterly direction. Capital stock and estimated cost, $300,000, of which $30,000 was subscribed. P. A. Douglass and J. E. Wooten, Danville, are interested.

Amendment to articles of incorporation of the St. Louis & North Arkansas R. R. to extend from Harrison 60 miles southeast. John Scullen and others, St. Louis, were to finance the proposed extension. Cost, $1,212,500.

Memphis, Helena & Louisiana, 187 miles in length from a point on the Iron Mountain railroad in Crittenden county, Ark., to the State line, in Chicot county; also branches 40 miles in length. Capital stock, $3,400,000, the estimated cost of construction. This is a Gould line and their interests are furnishing the capital.

Hot Springs R. R., extension from Batterfield, Hot Spring county, to Benton, 20 miles; estimated cost, $300,000. The Choctaw furnished the money.

Kansas City, Hot Springs & Southeastern, 82 miles, from Waldron southeast to Hot Springs. Capital stock, $1,250,000. A. B. Kirkwood, Kansas City, owns all but a few shares of the stock.

Mississippi, Arkansas & Western, 22 miles, from a point in Drew county, near Blissville, east into Chicot county to Gaines Landing, on the Mississippi River. Capital stock, $220,000, the estimated cost. E. G. Leszynsky and A. T. Bliss, Blissville, own nearly all of the stock.

Tyronza Central, 12 miles, all in Poinsett county. This is a Frisco branch and it is to furnish the capital of $180,000.

El Dorado & Bastrop, 45 miles, from El Dorado southwest to the State line in Ashley county, toward Bastrop, La. Capital stock, $675,000, estimated cost. This is a Gould line.

Jonesboro, Newport & Western, 40 miles, from Jonesboro to Newport. Capital stock, $200,000, estimated cost. Robert L. Stearns and J. S. Stearns, Luddington, Mich., are the principal stockholders.

Newport Bridge, Belt & Terminal. Propose to build a bridge over White River at Newport, with terminal track. Capital stock, $500,000. C. H. Jackson, New York, principal stockholder.

Cache Valley, 80 miles, from Newport to the north line of Clay county. Capital stock, $600,000, estimated cost. Elias W. Culver and associates, of Kansas City, are interested.

Western Arkansas Midland, 37 miles, from Hot Springs to Ophir, Montgomery county. Capital stock, $740,000, estimated cost. R. M. Quigley, St. Louis.

Monte Ne, four miles, from Monte Ne to a connection of the Frisco. Capital stock, $25,000, estimated cost. W. H. Harvey, Monte Ne, Ark., is interested.

ARKANSAS & GULF.—Articles of incorporation have been filed by this company in Colorado to build from Creede running up the Rio Grande to [illegible] Creek District, thence down the Vallecito and [illegible] Rivers, through New Mexico and Arizona to San [illegible] Harbor, Cal. Branch lines will run from Farm[illegible] to the iron fields of Utah. Chas H. Gage, of the G[illegible] duction Process Co., is interested.

ATLANTIC, QUEBEC & WESTERN.—This com[illegible] been formed with $500,000 capital stock to take [illegible] charter held by Charles Carpenter, Gaspe, Que. [illegible] build a line from Gasoe to a point north of Ca[illegible] where a junction will be made with the Inter[illegible] Among the directors of the company are Wm. [illegible] of Wm. Griffiths & Co., Ltd., Hamilton House, [illegible] gate St., London, E. C.; Joseph Mellowes, of Me[illegible] Co., 28 Victoria St., London, S. W.; C. B. K. C[illegible] the Manor House, Gaspe, Que. Sir Douglas Fox and [illegible] ners, 28 Victoria St., England, are the consulting [illegible] gineers.

AUSTIN & LOCKHART.—The company has [illegible] its charter with the secretary of state of Texas, [illegible] for the construction of a line from Austin south [illegible] Lockhart, a distance of about 35 miles. The capital [illegible] is $35,000. Among the incorporators are O. L. [illegible] Wauseon, O.; W. R. Davis, C. L. Hughes and [illegible] Miller, Creedmoor, Tex., and W. P. Allen and D. [illegible] Fall, Austin, Tex. The principal office is at Austin.

BALTIMORE & OHIO.—F. H. Clement & Co., [illegible] Broad St., Philadelphia, have been awarded by the Baltimore & Ohio R. R. the contract to build the new [illegible] burg & Western road from Niles to Newton Falls. [illegible] eight steam shovels will be put to work after the first of January. There is some heavy rock work on this line. ——Surveys are being made for the extension of the Conflluence and Oakland branch. The engineers have their headquarters at Farmington, and are moving toward Morgantown, W. Va.——It is reported that the officials of the company have announced that a new road some 200 miles long will be built, shortening the distance between Baltimore and Pittsburg by some 50 miles. J. M. Graham, Baltimore, Md., is Ch. Engr.

BASIN & ELLISTON.—Articles of incorporation have been incorporated with a capital stock of $300,000 in Montana. The new company will build a road between Basin and Elliston, with several branches to the principal mines between those two places. It is also intended to connect with Helena by way of Rimini. The Montana Reduction Co. is largely interested.

BATTENKILL R. R.—This company has been incorporated in New York with a capital stock of $75,000 for the purpose of building a railway from Greenwich to Schuylersville, a distance of seven miles. C. P. Noyes, New York, and I. C. Blandy, Greenwich, are interested.

BEDFORD & WESTERN.—Incorporated in Pennsylvania with a capital stock of $500,000 to build a road from Mt. Dallas, Huntington county, to Geigers, in Cambria county, on the Somerset and Cambria branch of the B. & O.

BILOXI, WAYNESBORO & CAHABA.—A charter has been issued to this company by Governor Longino, of Mississippi, for the construction of a railway from Biloxi, in Harrison county, through Jackson to a point between Leaf and Merrill, thence through Green and Wayne counties to Matherville, and thence to a terminal point on the Tombigbee River in Choctaw county to be selected later. L. Lopez, W. K. M. Dukate and J. Walker are incorporators.

BRANDON & SOUTH WESTERN.—Application will be made at the next session of the Dominion Parliament for permission to build an extension from Gladstone to a point near Lake Winnipegosic, thence in a northerly direction to a point near the Saskatchewan River.

BURNSVILLE & EASTERN.—Surveys have been completed for this line, in West Virginia. S. D. Brady is Ch. Engr., Parkersburg, W. Va.

CALUMET & SOUTHEASTERN.—Articles of incorporation have been filed by this company in Illinois with a capital of $100,000. The purpose of the company is to construct a line from a point on the Calumet River in Chicago in a southerly direction to the Ohio River. The incorporators are W. S. Dye, Chas. S. Barber and F. L. Schulze and others, of Chicago.

CHERRYVALE, OKLAHOMA & TEXAS.—S. M. Porter, Pres., Caney, Kan., writes us that B. J. Dalton, Lawrence, Kan., who was appointed Chief Engineer by the board of directors on Dec. 18, is now in the field with his assistants extending the survey of the line from Pawhuska southwest through Perry, Okla. Ter., to Kingfisher, on the Rock Island road. This will complete about 22[illegible] miles of survey and location, and the company expects to begin the work of construction early this year. A. W. Shulthis is Secy., and J. H. Brewster, Gen. Mgr.

CHICAGO & NORTHWESTERN.—It is stated that the company has decided to build a branch, an extension of the Wisconsin system, from Stella Junction, Oneida county, to a point in Forest county, 10 miles east. Marvin Hughitt is Pres.

CHICAGO, ROCK ISLAND & PACIFIC.—The company has decided to expend about $2,000,000 in permanent improvements along its line in Iowa, Nebraska and west to Denver in 1903. The improvements will be largely in the shape of ballasting of tracks and increasing the station facilities.

DALLAS, CLEBURNE & SOUTHWESTERN.—H. A. Genung, Ch. Engr., Cleburne, Tex., writes that the line from Cleburne to Egan, 10 miles, is completed and in operation. From Egan to Dallas nothing has been done except to make preliminary surveys. This last-named line is not yet definitely decided upon. The completed road will be 48 miles long. W. D. Myers is Pres.

DENVER, NORTHWESTERN & PACIFIC.—H. A. Sumner, Ch. Engr., Denver, Colo., under date of Dec. 23, writes that contracts were awarded on that date for constructing the 36 miles between Arvada and Boulder Park, which is on the located line from Denver to the Continental Divide, 60 miles. The Utah Construction Co., which has the contract for building the entire road, made the awards to Orman & Crook, Pueblo, Colo., and Geo. S. Good & Co., Lockhaven, Pa. This road will be about 500 miles long when completed, and will pass through Rollinsville, Sulphur Springs, Steamboat Springs, Hayden, Craig to Salt Lake City. David H. Moffat, Denver, is Pres.

DENVER & RIO GRANDE.—A third preliminary survey for the contemplated new route to Trinidad, Colo., is reported to have been started by the company. It is said that the construction of the new line will be started as soon as the surveys are completed. The grades and curves of the old road are very heavy. The new road will run through the Huerfano canal basin, and will cost something like $2,000,000. E. J. Yard, Denver, Colo., is Ch. Engr.

ERIE R. R.—This company, it is reported, will improve its terminals at Cleveland, O., and on the Mahoning Division, spending for the purpose about $700,000.

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

DES MOINES, IOWA FALLS & NORTHERN.—At the annual meeting of this company in Iowa Falls, Ia., on Dec. 10, it was decided to run the road northeast from Iowa Falls, and the executive committee was empowered to put a corps of engineers in the field as early as possible. The location of the new line will wholly depend on the surveys and estimates. The road is now completed to within 13 miles of Des Moines. E. S. Ellsworth is Pres.

FLORIDA SOUTHERN.—J. O. Hatch, Secy., Savannah, Ga., informs us that this company has been organized and chartered, but nothing further has been done, nor is likely to be done, before the fall of 1903. When built the line will probably be operated by the Georgia, Florida & Alabama Ry. It is proposed to run from Tallahassee via Perry, Old Town, Lebanon, Brookville and Tampa, having a length of about 246 miles. J. P. Williams, Savannah, is Pres.

GRAND TRUNK PACIFIC.—Application will be made to the Dominion Parliament at its next session for a charter for a railway running from Gravenhurst or North Bay, Ont., through the provinces of Ontario, Keewaton, Manitoba, Saskatchewan, Alberta, Athabaska and British Columbia to the Pacific Ocean at Port Simpson, on or near Bute Inlet, by way of the Pease River or the Pine River Pass.

GRINNELL & NORTHWESTERN.—This company is said to be making preparations for resuming work on the extension of its line southwest from Fraser Junction, Ia., to a point southwest some 100 miles distant. Work will be started early in the spring. The company securing the contract is known as the St. Paul, Minneapolis & Western Construction Co. The road was formerly the Newton & Northwestern.

LESLIE & SOUTHERN.—Articles of incorporation have been filed by this company in Arkansas with a capital stock of $3,000,000, to build a line from Leslie, in Searcy county, to Little Rock, a distance of 120 miles. The road will traverse five counties, Searcy, Stone, White, Cleburne and Faulkner. The incorporators include J. T. W. Tiller and W. J. Terry, Little Rock.; G. W. Lee, Harrison, and C. L. Leslie, St. Louis, Mo.

LOS ANGELES, OCEAN PARK & SANTA MONICA.—Incorporated in California with a capital stock of $1,000,000 to build 15 miles of railway. W. S. Hook, C. A. Sumner and E. E. Milliken are directors.

LOUISVILLE & NASHVILLE.—A surveying corps, headed by Capt. E. A. Wilder, was recently working in the country near Pineville, Ky., locating a route for an extension of the Cumberland River & Tennessee R. R., a recently acquired and newly constructed line.

MANCHESTER, DORSET & GRANVILLE.—W. C. Tobin, Treas., Worcester, Mass., writes us that this line will be 20 miles in length, running through the places named. Surveys have been made and rights of way secured from Dorset to Manchester. The contract for constructing the line has been let to L. C. Farnum, Boston, and several hundred men are now at work. The first section of five miles, from Dorset to Manchester, will be finished by March 1. The company will have a heavy tonnage from marble quarries along the route. About 100,000 tons will be shipped to New York city for the new New York Public Library at 42d St. and Fifth Ave., alone. O. W. Norcross is Pres., Worcester.

MARYLAND.—It is reported that an agreement of consolidation between the Susquehanna & Tidewater R. R. of Pennsylvania and the Baltimore & Hartford R. R. of Maryland has been filed at Annapolis. The combined companies propose to build a line from Havre de Grace, Md., to Wrightsville, Pa. The capital stock is $1,300,000. M. H. Houseman, Baltimore, is Pres.

MICHIGAN.—Fred. E. Montney, Yale, Mich., writes that the projectors of the proposed line of railway from Sanilac Center to Bay City will soon start in to secure the balance of the deeds and bonuses for the line, and after that work is completed the matter of construction will be taken up. The line will be about 146 miles in length, and may be either a steam or an electric.

MOHAWK & HUDSON.—Articles of incorporation have been filed by this company in New York for the purpose of building a line of railway from Oneonta to New Berlin, via Laurens, Morris, Butternuts and Pittsfield, a distance of 33 miles. It is reported that the construction will be started immediately and be pushed to an early completion. The capital stock is $500,000. Frederic F. Colver, Granville Whittlesey and Lewis R. Morris are directors. The line will be an extension of the Unadilla Valley road.

MONOCACY VALLEY & FREDERICK.—Incorporated in Pennsylvania with a capital stock of $120,000. The company is to acquire the Monocacy road, which runs from Thurmont, on the Western Maryland, to Catactin Furnace, a distance of four miles. This will be extended to Frederick, a distance of 11 miles. The contemplated road will run through Lewistown, Charlesville and Yellow Springs. Surveys of certain routes have been made, but L. R. Waescke, Thurmont, Md., states that none will be accepted, but a new route laid out. Charles Ramsburg, Luther Limmerman and Dr. Stein Schley, Frederick, are interested.

NEW YORK CENTRAL & HUDSON RIVER.—Mayor Low and his associates in the board of estimate of New York city, on Dec. 26, approved the plans for the improving of the New York Central's terminal facilities in New York city, the principal features of which are the abandonment of the use of steam as a motive power in the tunnel; the depression of the Central's tracks so as to make practically grade thoroughfares of the eleven streets intercepting the steam tracks between 45th and 55th Sts.; the continuation of Park Ave. as a single street southward on a viaduct from 49th St., where it now ends, to 45th St., the boundary of the station; the payment by the Central of $25,000 a year for extra subsurface privileges; the payment by the city to the company of $600,000 for constructing the new grade bridges across Park Ave.; denying the Central's request for vault privileges under Lexington Ave., because of the city's desire to build an east side extension of the subway under that avenue; and a connection under 42d St. with the new subway system. The complete improvements will cost something like $25,000,000.

NEW YORK CENTRAL & HUDSON RIVER.—It is stated that this company has decided to expend $600,000 in extending its freight tracks between Dewitt and Minoa. W. J. Wilgus, Grand Central Station, New York, is Ch. Engr.

NORTHERN CALIFORNIA.—Articles of incorporation have been filed by a corporation in California for the purpose of building a standard-gage road in Northern California to run from a point at the junction of the North Fork of the Feather River and the East Branch of that river, in Plumas county, up the East Branch to a point at Crescent Mills.

PENNSYLVANIA R. R.—John P. Green, First Vice-Pres., has stated in part as follows regarding the work on the proposed tunnel under the North River, connecting New York and Jersey City, for which a franchise has just been granted: "We will begin work as soon as the engineers are ready. We will spend $40,000,000 in three years. It is impossible to say now how many men will be employed on the work. The details will be arranged by the engineering and construction departments."

PENNSYLVANIA.—B. F. Jones, Jr., Pres. of the Jones & Laughlin Steel Co., is reported to have said that surveys for the proposed line to be built by that company are about completed. The road will be an entirely independent line without connections with other roads and will be used for the company's business only.

PITTSBURG & LAKE ERIE.—Improvements costing about $2,000,000 are said to be planned by this company during the year 1903. The work will include the completion of the double track up the Monongahela River and the establishment of freight terminals at or near Smithfield and 22d Sts., Pittsburg. Also the extension of the four-track system of the road to Youngstown, O., and improvements in that city. J. M. Schoonmaker is Vice-Pres. and Gen. Mgr.

RED DEER VALLEY RY. & COAL CO.—This company will make application to the Dominion Parliament at its next session for power to extend its line to the Saskatchewan River, after the line from Calgary to a point in Range 23, west of the Fourth principal meridian, is constructed.

SAXTONS RIVER & GRAFTON.—A bill chartering this company has passed the legislature, and will become a law. The company is capitalized at $10,000, and will build a road to Cambridgeport. Prominent citizens of Grafton and Saxtons River are interested.

SOUTHERN RY.—It is reported that this company expects to spend $250,000 on the Asheville Division in the way of grade reduction, track ballasting and laying of new steel rails. W. R. Woodward is Asst. Engr., at Asheville, N. C.

SOUTHERN.—It is believed to be the intention of this company to buy the Tennessee Northern road and build through the Bowel Valley into Middleborough, Ky., where a connection will be made with the Harland and Middleborough road. The plan is to penetrate every available coal point in the Kentucky and Tennessee Mountains, taping the vast tracts which are being rapidly bought up by Northern capitalists. It is estimated that the transfers of coal properties in this section within six months has reached $500,000. William Pardee, the Pennsylvania capitalist, is said to be buying up Kentucky and Tennessee coal lands, having this in mind.

TEXAS.—Our correspondent has sent us the following statement of railway mileage constructed in Texas during the year ending Dec. 31, 1902:

	Miles.
Cane Belt: Bay City to Matagorda, and Donavant Spur	22.6
Chicago, Rock Island & Texas: Jacksboro to Graham	27.3
Choctaw, Oklahoma & Gulf: State Line to Yarnall	54.8
Dallas, Cleburne & Southwestern: Egan to Cleburne	9.8
Eastern Texas: Kennard Mill west	3.3
El Paso Terminal: El Paso to the Rio Grande	4.5
Ft. Worth & Rio Grande: Brownwood to the Colorado River	20.3
Gulf, Beaumont & Gt. Northern: San Augustine south	31.8
Houston & Texas Central: Burnet to Lampasas	23.0
International & Gt. Northern: Waco to Ft. Worth and Navasoto to Mink	123.0
Moscow, Camden & San Augustine: Camden east	3.0
New York, Texas & Mexican: Van Vleck south and to Bay City	22.5
Orange & Northwestern: South Orange spur	3.1
Red River, Texas & Southern: In Ft. Worth	4.6
St. Louis Southwestern: Noell to Dallas	11.4
Texas & Louisiana: Donovan to Monterey	7.2
Texas & New Orleans: Neches River to Jacksonville and from Mahl north	26.8
Texas Central: Ross to Waco	12.9
Texas Short Line: Grand Saline to Hoyt	9.3
Texas Southern: Gilmer to East Winsboro	29.4
Total	490.6

The 10th annual report of the Railroad Commission of Texas for the year ending June 30, 1901, stated that there was in operation in Texas on that date 10,153.84 miles of main line railroad officially recognized by the Commission. The 11th annual report stated that on June 30, 1902, there was in operation 10,616.93 miles, or an increase (net) of 463.09 miles over the previous year. This did not include more than 100 miles of so-called "logging" of "lumber" railroads in the state, a large part of which is chartered railroad under the general laws; nor about 42 miles of interurban railroad, neither of which classes of railroad are recognized by the Commission as coming under its jurisdiction, hence are not included in its report. The Commission has been officially advised that since June 30, 1902, the date of the last report, approximately 309.33 miles of main line have been constructed and put into operation in the state, making an approximate total mileage in operation on December 31, 1902 (allowing 11.66 miles to be deducted for various reasons) of 10,914.7. If the mileage of the above mentioned "logging" railroads, which are chartered railroads, and the interurban railroads are added to this mileage as given by the Commission, there is in operation in Texas on December 31, 1902, about 11,075 miles of bona fide railroad.

The following railroad is now under construction, or under contract for construction, or has been finally located, and the greater part of which it is thought will be constructed during the year 1903:

	Miles.
Chicago, Rock Island & Gulf: Ft. Worth to Galveston	315
International & Gt. Northern: Navasota to Madisonville and from Houston to Beaumont	127
Gulf, Beaumont & Northern: San Augustine to Center	20
Eastern Texas: Kennard to Crockett	20
Granger, Georgetown, Austin & San Antonio: Granger to Austin	45
New York, Texas & Mexican: Bay City west	25
Texas & New Orleans: between Jacksonville and Mahl	26
Ft. Worth & Rio Grande: Colorado River to Brady	30
Gulf & Interstate: rebuilding from High Island to Bolivar	27
Trinity & Brazos Valley: Cleburne to Mexia	80
Kansas City, Mexican & Orient: Red River to San Angelo	225
Choctaw, Oklahoma & Texas: Yarnall west to state line	90
Oklahoma City & Texas: Red River to Acme and Quanah	15
Total	1,045

There is projected for construction in the next few years in Texas, in addition to the mileage noted in the last table, the following lines of railroads and extensions, the greater part of which has already been chartered and all of which may be regarded as substantial projects and which lie in territory standing in the greatest need of railroads as a factor in its development. They are in the main extensions of existing railroad systems or to be built as feeders to same.

	Miles.
Ft. Worth & Rio Grande: Brady to Spofford and San Antonio	275
Kansas City, Mexico & Orient: San Angelo to the Rio Grande	300
International & Great Northern: Italy to Dallas and Beaumont to Orange	70
Trinity & Brazos Valley: Mexia to Beaumont	200
St. Louis Southwestern: Gatesville to Hamilton and Lufkin to Orange	150
New York, Texas & Mexican: west of Bay City and south of Van Vleck	70
San Antonio & Gulf: Stockdale to Cuero	40
Weatherford, Mineral Wells & Northwestern: Mineral Wells to Graham and Jacksboro	60
Granger, Georgetown, Austin & San Antonio: Austin to San Marcos	35
Gulf, Colorado & Santa Fe: Lometa to San Saba	25
Texas Central: Stamford northwest to state line	240
Chicago, Rock Island & Texas: Red River to Sherman	20
Velasco, Brazos & Northern: Anchor to Duke and Sugarland to Hempstead	70
San Antonio & Crowther: San Antonio south	75
Total	1,630

The falling off in railway construction during 1902 (536.9 miles below 1901) is largely due to the great amount of rainfall which, during the last quarter of the year, has practically suspended tracklaying. E. R. McLean is Secy. R. R. Commission of Texas, and R. A. Thompson is Ch. Engr., Austin.

WHITE RIVER R. R.—It is proposed to extend this road from its present authorized terminus, which is the boundary line between the counties of Boone and Marion, in Arkansas, to the boundary line between Missouri and Arkansas, and thence northwesterly through the counties of Taney, Stone, Barry, Lawrence and Jasper, in Missouri, to a connection with the Lexington & Southern Division of the Missouri Pacific R. R. at Carthage, a distance of 124 miles. The capitalization of the company is increased at the rate of $2,000 per mile to provide for the extensions. H. Romer, St. Louis, Mo., is Ch. Engr.

WINDSOR LOCKS R. R.—This company effected its organization in the office of Perkins & Perkins, in Hartford, Conn., on Dec. 15, when the Short Line R. R. was also organized. Both are steam railroads, with a capital of $40,000 each. The Windsor Locks road will run from East Granby to Chestnut St., Windsor Locks, and will be about four miles long. The Short Line Railroad Co. is to run across the Montague farm in East Granby and will be less than a half miles in length.

WOLF CREEK RY.—Incorporated in Kentucky with $200,000 capital stock to build a road from Wolf Creek giving an outlet to Inez. It will be operated by the Norfolk & Western.

YORK HAVEN & ROWENNA.—Incorporated in Pennsylvania to build a connecting line between the Pennsylvania and the Northern Central lines. The capital stock is $100,000. The incorporators are all connected with the Pennsylvania R. R.

STREET AND ELECTRIC RAILWAYS.

(For foreign street and electric railways see under "Foreign Contracts and Export News.")

LITTLETON, MASS.—The Lowell & Fitchburg St. Ry. has been granted a franchise to lay tracks through this town.

SPRINGFIELD, MASS.—An effort is being made to secure a charter for the proposed Huntington & Shelbourne Falls Electric Ry. W. A. Whittlesey, Pittsfield, is Pres., and J. H. Dickinson, Huntington, Secy.

PROVIDENCE, R. I.—The Newport & Bristol Ferry R. R. Co. has been organized and elected its officers as follows: E. A. Brown, Pres.; Melville Bull, Vice-Pres., and Geo. A. Weaver, Secy. and Treas. The company proposes to have its line running next summer. The surveys are now in progress. The cost of the line will be approximately $300,000.

PROVIDENCE, R. I.—F. E. Holden, P. O. Box 713, writes that the Providence & Burrillville St. Ry. Co. has not yet effected its organization.

HARTFORD, CONN.—The Naugatuck Valley Electric Ry. Co. has applied to the General Assembly for a charter to construct a line of street railway connecting the towns of Naugatuck, Beacon Falls and Seymour.

NEW LONDON, CONN.—The New London St. Ry. Co. has given notice of its intention of extending its lines to East New London and through Riverside Park.

ROCKVILLE, CONN.—New plans have been decided upon for the construction of the proposed Stafford-Rockville electric road, and Thomas C. Perkins and the chief engineer were recently in this city in connection with the proposed changes.

ALBION, N. Y.—It is stated that the Albion Electric Light & Power Co. has completed its roadbed in Albion and will extend its road from East State St. to Mount Albion Cemetery in Cemetery Ave. Frank A. Dudley, Niagara Falls, is Pres.

BATAVIA, N. Y.—The board of trustees has granted a 99-year franchise to the Union Traction Co., which proposes to build and operate an electric line from Olcott to Batavia.

BUFFALO, N. Y.—The International Ry. Co. has practically decided to build a line to the steel plant as soon as the weather permits.

NEW YORK, N. Y.—Contracts have been made by the Interborough Rapid Transit Co. with the Metal Plated Car & Lumber Co. for the copper sheathing of 500 cars to be used in the subway.

TROY, N. Y.—The Forest Park Ry. Co. of Troy was incorporated on Dec. 18, with a capital stock of $20,000, to construct a street surface line from Pawling Ave. and Ford St., to a point near the Forest Park Cemetery on the Troy and Brunswick highway, Brunswick. Joseph A. Leggett, Arthur G. Cherry and J. W. Craver, Troy, are interested.

MORGANTOWN, PA.—Reports state that the Morgantown Electric Light & Traction Co. has awarded the contract to the Dean & Hoffman Co., Morgantown, for the construction of four miles of street railway, to be completed by June 1. Work on the powerhouse has been started. In the construction of the road there will be two cuts made requiring the removal of 10,000 cu. yds. of material. The amount of the contract is about $30,000.

GREENVILLE, MASS.—The Delta Light & Power Co. will build a street railway in this city. The new line will traverse the principal streets and be about 3½ miles in length.

JACKSON, MISS.—The Jackson Belt Line Electric R. R. Co. recently incorporated, has given notice of its organization. The company is capitalized at $200,000, and will

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

build a belt line around the city on a route yet to be selected. J. B. Harris is Pres., and J. S. Hamilton, Vice-Pres. and Gen. Mgr.

CHATTANOOGA, TENN.—The preliminary surveys for the proposed new line of the Chattanooga Electric Ry. Co. have been started. At the meeting of the stockholders on Jan. 15 the estimates and maps of the route will be submitted, and the plan will then be definitely determined. Two routes will be laid out.

DAYTON, O.—G. M. Gest, contractor, has been awarded the additional contract in this city by the Oakwood St. Ry. Co. and the Peoples' St. Ry. Co. for the reconstruction of their tracks. The contract amounts to approximately $15,000.

ELYRIA, O.—The Lorain & Eastern Ry. has been incorporated with a nominal capital stock of $1,000 which will be increased when required to build a new track from Rocky River to Lorain and Elyria. The track is to run along the Wooster road from Rocky River to Gasser's, to South Lorain, North Lorain, and thence to Elyria. A. Stuber, Wm. D. Young and Geo. L. Cooley are given in local papers as incorporators of the new company.

NASHVILLE, IND.—Reports from this place state that the plan to build the Columbus, Bloomington & Terre Haute Ry. may be revived. The company was incorporated in 1898, and Chas. W. Shaw was the chief promoter. While at work on the project Shaw obtained the right of way for more than one-half the distance. The road, as first proposed, would be 91 miles long, and run from Columbus, Ind., to Terre Haute, Ind. It would pass through Mt. Liberty, Nashville, Belmont, Bloomington, Elettsville, Spencer Clay City and Riley.

NOBLESVILLE, IND.—It is stated that the Indianapolis Northern Traction Co., which is building the interurban line connecting Indianapolis and Noblesville, Atlanta, Arcadia, Cicero, Tipton, Kokomo, Logansport, Peru and intermediate points, is pushing the work of construction as rapidly as possible. The grade from Broad Ripple through Carmel to this city, is practically finished, and the entire line is expected to be completed by middle summer.

DETROIT, MICH.—The Detroit, Monroe & Toledo Short Line Co. has been incorporated with a capital stock of $3,000,000. The formation of the new company is the consummation of the plans of the Black-Mulkey syndicate for the extension of the Monroe and Toledo line to this city. The road will be built on the original plan by way of Flat Rock. A single track will first be built over a private right of way and later the remaining $1,000,000 worth of bonds will probably be used to double track the line. The overhead equipment has been purchased from the Detroit and Toledo Shore line which is to become a steam proposition under the sale to the Grand Trunk. The line will be built by early summer. Matthew Slush, of Mt. Clemens, is Pres.

GRAND RAPIDS, MICH.—An extension of time has been secured by the Prasser electric road interests for the beginning of construction. The line will run from Grand Rapids to Kalamazoo by way of Moline, Wayland, Bradley, Shelbyville, Martin and Plainwell.

DECATUR, ILL.—The Decatur Traction & Electric Co. is reported to be planning some extensions of its lines during the spring of next year. A part of the right of way has been secured. The plans are not yet completed, but a loop in the northwestern part of the city is proposed.

MOUNT VERNON, ILL.—John R. Piercy, County Clk., is said to be promoting an electric railway from this place to Belleville, to connect there with the line to St. Louis. A corporation with $20,000 capital stock will be organized. The road will run through Woodlawn, Ashley, Nashville, Mascoutah and other towns en route.

MADISON, WIS.—The La Crosse & Southeastern R. R. Co. has been incorporated with a capital stock of $800,000 to build a steam or electrically propelled road and system in this city. Among those interested are Joseph Boschert, David H. Palmer, F. A. Cummings and James Furnock.

AUDUBON, IA.—A proposition is mentioned in local papers for the construction of an electric railway from Marne to Manning by way of Kimballton, Popular and Fiscus. About 8,000 has already been subscribed.

BOONE, IA.—The construction of a new electric railway from this city to Webster City is proposed. L. W. Reynolds is one of the promoters.

CHARITON, IA.—Local papers report a project to build an electric road from Knoxville to Chariton and thence to Corydon and Allerton, which is to be built and be ready for operation by next summer. The proposition is being promoted by S. H. Mallory. It is also proposed in connection with the construction of the road, to establish electric light and water-works plants. The power house will be located at the Inland coal mine. Mr. Mallory expects to raise $50,000 to start the enterprise.

CRESTON, IA.—Local papers state that the Collins Construction Co., Chicago, is to have the contract for constructing the line of railway from Creston via Macksburg to Winterset for the Creston Electric Light Ry. & Power Co., the road to be finished by Jan., 1904. Work will begin early in the spring.

DULUTH, MINN.—Application has been made by A. C. Volk & Co. to the council for a franchise to construct and operate an electric railway from Raleigh St. to Commonwealth Ave., in West Duluth, about six miles.

ST. PAUL, MINN.—A syndicate will petition the legislature at the coming season for a 30-year franchise for an elevated electric railway connecting St. Paul and Minneapolis. Sherman S. Smith is interested.

OMAHA, NEB.—Articles of incorporation have been filed by the Omaha & Council Bluffs St. Ry. Co. with a capital stock of $15,000,000, taking over the property of the Omaha & Florence St. Ry. Co. The new company will expand in every way and among the proposed extensions of its roads are a line from Omaha to Florence in Washington county to Calhoun and Blair, a distance of 25 miles; Omaha to Millard, Elkhorn Valley and Fremont, 46 miles; Omaha through Douglas and Sarpy counties to Saunders county, to Wahoo and Ashland, and then into Lancaster county to Lincoln, 56 miles; from Omaha to Plattsmouth, 21 miles. Another projected line in Iowa is to go from Council Bluffs through Pottawattamie and Cass counties to Griswold, a distance of 26 miles. Guy C. Barton, is Pres., and Wm. S. Cox, Secy., of the Omaha & Florence St. Ry. Co., and will probably hold their respective offices in the reorganized company.

FARGO, N. DAK.—The council has granted franchises to the Fargo & Moorhead St. Ry. Co., capitalized at $250,000, which has established its headquarters in this city. The system is to be completed by July 1.

KANSAS CITY, MO.—Reports state that V. F. Crouch, Iola, Kan., president and general manager of the company which is to build an electric line between Kansas City, Kan., and Bonner Springs, has gone over the line accompanied by his chief engineer and a party of men who are here to finish up the work of locating the line. It is now intended that the actual work of construction shall begin immediately.

ST. LOUIS, MO.—Narcisse Bordeaux and other citizens of Cahockia have under consideration the plan to construct a street car line extending from East St. Louis down to that village and thence to Millstadt and Columbia.

HARRISON, ARK.—It is stated that John J. Geghan, the promoter of the Ozark & Kajah Springs Electric Ry. Co. will immediately begin the survey for the proposed road from Harrison to Dodd City, Marion county, and from Harrison to Jasper, Newton county.

SOUTH McALESTER, IND. TER.—Artists of incorporation have been filed by the Purcell & Lexington St. Ry. Co. with a capital stock of $100,000, for the purpose of building an electric street railway between Purcell, Ind. Ter., and Lexington, Okla. Wm. T. James, Thomas C. Woods and J. F. Sharp are the incorporators.

TACOMA, WASH.—General Manager Dimmich of Tacoma Ry. & Power Co., states that the company proposes making extensive improvements in the system. It is proposed to reconstruct and double-track portions of the road and also to increase the rolling stock.

SAN BERNARDINO, CAL.—Kohl Bros., owners of San Bernardino & Arrowhead motor road, intend to convert their steam road into electric and increase track to standard gage. Application for a franchise to gain entrance to the principal business streets has been made and advertisement for bids for the same ordered.

SAN PEDRO, CAL.—The board of trustees has granted the Pacific Electric Ry. Co. a franchise for 50 years to build a line in this city.

ST. THOMAS, ONT.—Steps are being taken to expend the St. Thomas St. Ry. Co.'s line to Port Stanley, a distance of nine miles.

LIGHT, HEAT AND POWER PLANTS.

(For foreign heat, light and power plants see under "Foreign Contracts and Export News.")

ELLSWORTH, ME.—We are informed that the consolidation of the Bar Harbor Electric Lighting Co., the Ellsworth Illuminating Co. and the Ellsworth Water Co. is being effected. This is being done with a view to the development of electricity from water power for lighting and power purposes to such, as in the vicinity of Ellsworth and Bar Harbor, may need it. The plant is to be located on the Union River at a place where, according to a prospectus, the run off shows 4,500 HP. capable of development. A. Wendall Jackson, 5 Beekman St., New York, is the engineer.

ROCHESTER, N. H.—The Rochester Gas Light Co., at its annual meeting, is said to have taken action towards erecting a gas manufacturing plant in this city.

HOLYOKE, MASS.—Formal transfer of the local gas and electric plants have been made to the city and they are now operated by the municipality. W. H. Snow is the acting manager.

METHUEN, MASS.—A site has been purchased here on which the Lawrence & Methuen St. Ry. Co. will build a power house.

WEBSTER, MASS.—Municipal ownership of the gas and electric light plants has been discussed by the Citizens' Club. It is also said that Jas. T. Shanley, proprietor of the Hotel De Witt, contemplates installing an electric plant of his own.

NEW LONDON, CONN.—The necessary papers have been filed by the New London Gas & Electric Co., who will ask the next general assembly for permission to increase its capital stock from $400,000 to $500,000.

WILLIMANTIC, CONN.—The Willimantic Gas & Electric Light Co. has received permission to petition the general assembly for leave to increase its capital stock and bonds to $300,000 each.——It is expected that work on the proposed power house of the Willimantic Traction Co., M. A. Cavanaugh, Mgr., to be located at South Windham, will be commenced early in the spring.

ALBANY, N. Y.—The entire output, save about 10,000 HP., of the Hudson River Water Power Co. is said to have been contracted for by the Albany Electric Illuminating Co., Troy Gas Co. and the United Traction Co. The Traction Co. will use this power for running, lighting and heating its cars, while the other two companies will be enabled to furnish large additional amounts of power to manufacturers.

CANANDAIGUA, N. Y.—The Lima Gas Co. has been granted a franchise in this village, according to the terms of which the company must be in operation by Dec. 30, 1903.

HERKIMER, N. Y.—The supervisors have been considering a resolution appropriating $10,000 for a new power house and boilers at the county house.

NEW YORK, N. Y.—Bids are asked by the commissioner water supply, gas and electricity, 13 Park Row, until Jan. 12, for furnishing gas or other illumnating material for lighting purposes and for care of lamps for a term of one year. Robt. Grier Monroe, Comr.

NIAGARA FALLS, N. Y.—The Lower Niagara River Power & Water Supply Co. has applied for a franchise to do business in this city.

ONEIDA, N. Y.—The contract for lighting the streets of this city for a term of two years has been let to the Madison County Gas & Electric Co. at a total of about $6,500 a year.

JERSEY CITY, N. J.—The contract for gas lighting for one year has been let to the Hudson County Gas Co. for 30 cts. per night each. The contract for oil lighting was let to the New York & New Jersey Globe Gas Light Co. at the same price. For the electric lighting the United Electric Co. bid $99 per light per year on a one-year contract. On a five-year contract their bid was $97.50 per light per year.

WASHINGTON, N. J.—The contract for street lighting here has been let to the Washington Electric Light Co. for a two-year period at $60 per year for arc lights and $15 for incandescent, to be run on the moonlight schedule.

DALLASTOWN, PA.—Reports state that an electric light plant is to be built in this place.

ELIZABETHVILLE, PA.—The borough council is said to be considering propositions for lighting the town with electricity.

MT. HOLLY SPRINGS, PA.—Reports state that the Carlisle & Mt. Holly Electric Ry. Co. will double the capacity of their plant at this place, and are in the market for the necessary equipment.

MECHANICSBURG, PA.—A contract for all-night street lighting has been let to the Cumberland Light, Heat & Power Co.

PHILADELPHIA, PA.—Plans for a steam heating, power and electric plant, a fire service system and sprinklers for the factory of A. J. Cameron & Co. have been made by Stearns & Carter, and are now in the hands of Robt. Scott & Co., S. Faith & Co., Geo. F. Uber & Co., and H. P. Richards.——The contract for the machine foundations in the power house of the Ladies' Home Journal building has been let to Lewis Haven's Sons. Concrete, brick [illegible] and terra cotta will be used, and the work will cost $10,000.

SELLERSVILLE, PA.—Reports state that a [illegible] for an electric light plant here is to be granted to [illegible] A. Clayton.

STROUDSBURG, PA.—C. Jess. Young, Secy., 37[illegible] Carlisle St., Philadelphia, writes us that bids will [illegible] ably be received about April 1 for the proposed [illegible] plant of the Delaware Water Gap Water Power Co. [illegible] located at this place. Surveys have been made [illegible] plant, which is to be operated by water and will [illegible] capacity of 4,000 HP. The estimated cost is $5[illegible] Jos. H. Young, C. E., 906 Crozer Bldg., Philadelphia, [illegible] designing engineer.

WRIGHTSVILLE, PA.—The local electric light company has let the contract for erecting an electric light [illegible] Hamilton Weller. The brick work has been sublet [illegible] vin Flury.

NORFOLK, VA.—The feasibility of a municipal light plant has been brought before the council by Fr[illegible] K. Wonycott.

CAMERON, W. VA.—G. S. Emsheimer, Wheeling, W. Va., has applied for a franchise for an electric light plant. It is said that a company, to be known as the Co[illegible] Electric Light, Heat & Power Co., is to be formed to start work on a plant.

FAYETTEVILLE, W. VA.—A report from here states that the power house at the mine of the Rothwell Coal Co., at Dubree, was destroyed by fire, causing a loss of about $10,000.

SWEET SPRINGS, W. VA.—J. W. Bell, Mgr., Sweet Springs Co., is reported as wanting to contract for an electric light plant, steam laundry, baths, etc.

CONCORD, N. C.—A franchise for electric lighting has been granted to Thos. A. Scott and Reuben Barton, of Richmond, Va. They propose, it is said, to erect a plant and also a 25-ton ice factory.

HAMLET, N. C.—A charter has been granted to the Hamlet Electric Light Co. The company is capitalized at $100,000 and proposes to establish an electric light plant in this town. Geo. O. Sanders is an incorporator.

MANLEY, N. C.—Reports state that W. O. Ruggles and others will establish a health resort and village, build an electric plant and water-works, etc.

SALUDA, N. C.—Capitalists are reported to have bought the water rights at the Green River Narrows for the purpose of erecting a power plant at that place.

WASHINGTON, N. C.—A franchise for the establishment of an electric light plant has been granted to S. C. Bragaw.

BARNESVILLE, GA.—It has been voted to issue $6,000 electric light bonds, $2,000 water and $2,000 school improvement bonds.

SANDERSVILLE, GA.—This city is reported to be considering the erection of a light and water plant. Dr. D. L. Cheatham is Mayor.

HUNTSVILLE, ALA.—An election is to be held Jan. 19 to vote on the issuance of $20,000 of bonds for a municipal electric lighting plant.

WOODSVILLE, MISS.—The issuance of $30,000 of bonds for installing electric lights and water-works has been voted.

BROWNSVILLE, TENN.—The plant of the Brownsville Electric Light Co. has been sold to the Burt Smith Co., according to reports.

COVINGTON, TENN.—The purchase of a new 120-KW. dynamo has been decided on. The cost is estimated at about $1,775.

LEWISBURG, TENN.—Bonds to the amount of $5,000 have been voted for an electric light plant.

LYNNVILLE, TENN.—The establishment of an electric light plant is being considered.

OBION, TENN.—This city, according to reports, contemplates constructing water-works and an electric light plant.

COVINGTON, KY.—The contract for electric lighting the streets has been let to the Union Light, Heat & Power Co. for $75 per lamp per year for a 2,000 c. p. arc and $65 for a 1,200 c. p. arc.

LOUISVILLE, KY.—Among the other estimates of appropriations required for the Jeffersonville Reformatory is an item of $7,500 for increasing the capacity of the power plant and one of $10,000 for procuring soft water.

CLEVELAND, O.—Prof. E. W. Bemis, Supt. W.-W., has been gathering statistics and data on the cost of establishment and maintenance of municipal electric lighting plant. This was done at the direction of the council finance committee with the ultimate end in view of erecting a plant here.

ANDERSON, IND.—Reports state that improvements are to be made to the municipal light plant at a cost of $20,000.

BLUFFTON, IND.—A local report states that a company is forming with $15,000 capital to put in an electric lighting plant.

FRANKFORT, IND.—A local press report states that the municipal lighting plant has proved a failure and unless decided improvement is made in the service other private gas or electric plants will be installed.

MONTPELIER, IND.—The purchase of the city water and light plants by outside parties is said to be contemplated.

BENTON HARBOR, MICH.—This city, according to reports, is to have a municipal lighting plant.

CRYSTAL FALLS, MICH.—Mayor R. Webs writes us that bids will be received until Jan. 10 for the enlargement of the city electric light plant. A dynamo and switch board is to be added. G. F. Sturtevent, Fisher Bldg., Chicago, is Des. Engr.

GRAND RAPIDS, MICH.—It is reported that the Flat River dam project is again under consideration and that surveyors with this end in view are already at work for the consolidated electric light companies. The power system which the Church syndicate formerly had in view consisted of a dam about 1½ miles above Lowell, which would give a fall of about 30 ft., and the construction of a power plant at that place.

PORTLAND, MICH.—Extensive additions, it is said, are to be made to the Portland electric light plant.

RED JACKET, MICH.—A 30-year heating and lighting franchise has been granted to John Burder. A company will be organized and a central lighting and heating plant erected.

STERLING, ILL.—The Sterling Gas & Electric Light Co., according to reports, are making arrangements for the extension of their mains early next spring.

GRAND RAPIDS, WIS.—Reports state that the Consolidated Water Power & Paper Co. is to develop water power at this point of the Wisconsin River next spring.

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

J. C. Jacobson has the preparation of plans and will supervise the construction. The new dam which it is proposed to construct will be over 1,700 ft. long, 40 ft. wide at the base and 12 ft. at the top, and will develop 7,000 HP., about one-half of which will be used by the company for its paper mill and the remainder developed into electrical power will be sold to other concerns wishing to locate here. It is estimated that $500,000 will be spent on these improvements.

DES MOINES, IA.—Bids are asked until Jan. 5 for heightening the spillway of a water-power dam and constructing a concrete abutment. John W. Alvord, Cons. Engr., Chicago, Ill.; R. H. McMullen, Gen. Mgr., Des Moines Edison Light Co.

OSAWATOMIE, KAN.—The council, according to reports, has decided to put in an electric light plant of a capacity of 100 arc and 5,000 incandescent lights, to cost about $25,000.

SPEARFISH, S. DAK.—The matter of extending the lighting system has been agitating the council.

LA MOURE, N. DAK.—W. C. Batterson writes us that C. J. Allister, of La Moure, is talking of putting in an electric light plant in the spring. He also writes that the city needs water-works, but up to the present time all plans for securing them have failed.

KALISPELL, MONT.—F. W. Tinkel, Secy., writes us that the Big Fork Electric Power & Light Co. will install a 400-KW. two-phase alternator of 440 volts, with transformer to raise voltage to 12,000. The alternator will be direct-connected to the turbine, and two small exciters and two small turbines will be used. About 200 ft. of 60-in. iron penstock will also be bought. None of the machinery has been purchased.

COLUMBIA, MO.—The contract for constructing an addition to the University power house has been let to J. W. Wilson, St. Louis, Mo.

HUNTSVILLE, MO.—This city has voted to sell the local gas plant to Messrs. Shreve & Knight, of Boonville. A franchise for an electric light plant and water-works system was also given them, both plants to be installed as soon as possible.

ST. JOSEPH, MO.—Ex-Ald. John L. Zeidler and others have asked for a franchise for a hot water heating and electric light plant in this city. The franchise ordinance calls for a $400,000 plant, to be completed in 18 months.

LITTLE ROCK, ARK.—Unofficial reports state that the Little Rock Traction & Electric Co. will build an entirely new power house, costing over $500,000, of double the capacity of the present one. It is possible that work may be commenced early in 1903.

EL PASO, TEX.—J. P. Ramsey has petitioned for a franchise for an electric lighting plant.

PALESTINE, TEX.—The council has granted, to a northern concern, franchises for an electric light plant, gas plant and street railway.

CANON CITY, COLO.—A franchise for a gas plant here has been granted to H. A. Black, of Pueblo.

PHOENIX, ARIZ.—The contract for the erection of the electric plant at Ash Forks has been let by C. Harris. Work on the building will be commenced at once.

WEISER, IDAHO.—The Supreme Court has reversed the judgment of the District Court whereby this city was enjoined from issuing $40,000 of bonds for electric lights and water-works.

LOGAN, UTAH.—According to reports suit has been filed against the Logan city council to prevent the issue of $65,000 electric light bonds, voted by the people this year. It is claimed by opponents of the bonds that the city cannot legally issue bonds for more than $28,000. The matter will be appealed to the Supreme Court.

NELSON, B. C.—A by-law for $150,000, to be spent for putting in a power plant and extending the electric light system, was carried at a recent election.

MIDLAND, ONT.—The purchase and operation by the town of the local electric light plant is contemplated. T. S. Truman is Town Clk.

SHERBROOK, QUE.—The matter of a municipal electric lighting system will probably come up at the January election.

BRIDGES

(For foreign bridge work see under "Foreign Contracts and Export News.")

CONEWANGO, N. Y.—Reports state that two bridges must be built across the drainage canal in this town next spring.

NEW YORK, N. Y.—It is reported that the contract for the steel for the proposed cantilever bridge, to be built over Hell Gate by the New York Connecting Ry., has been let provisionally to the Pennsylvania Steel Co.

NEW YORK, N. Y.—A sub-committee of the board of estimate has granted certain privileges to the N. Y. C. & H. R. R. R. for the improvement of its terminal facilities about the Grand Central Station. It also proposed radical changes in the plans, chief among which is the continuation of Park Ave. in the form of a steel viaduct, 90 ft. wide, from 49th St. to 45th St.

AUBURN, PA.—Commissioners appointed by the Dauphin County Court have recommended the building of a steel bridge across the Schuylkill River, near this place, at a cost of about $10,000.

NEW CASTLE, PA.—Louis T. Kurtz, local counsel for the Pittsburg & Lake Erie, has announced that his company is willing to proceed with the city in the erection of the proposed Gardner Ave. viaduct over the Shenango River.

NEWTOWN, PA.—The contract for a new bridge on Jefferson Ave. this city, has been let to the Wynkoop-Braley Co. for $6,500.

PITTSBURG, PA.—Capt. W. L. Sibert, U. S. Engr., has received from the Western Bridge Co. detail plans for the proposed bridge to be built across the Ohio River, between Allegheny and McKees Rocks. The plans provide for a steel structure with a 900-ft. main span, having a clearance of 90 ft.——It is reported that Union bridge across the Allegheny River at this point may be raised 35 ft., making the height above the river 70 ft.——Capt. Sibert will give a rehearing Jan. 6 on the matter of elevating the Sixth St. bridge.

POTTSVILLE, PA.—Viewers have filed a favorable report and the state will erect a new steel, one-span, 18 × 150 ft. bridge in this county; estimated cost, $15,000.

TOWANDA, PA.—David A. Keefe, Bridge Engr., Athens, Pa., writes us that the following bids were received by the county commissioners for building 1,000 yds. of abutment and pier concrete masonry, and three 230-ft. spans, with 18 ft. clear roadway: (a) bid for substructure, (b) bid for superstructure, (c) for both: H. Rebins (a—accepted) $7,300. T. Wilson (a) $8,000, D. A. Keefe (a) $8,400, (b) $41,800, (c) $50,390; Whalen Bros. (a) $8,480, Louis Piolett (a) $9,540, York Bridge Co. (c) $50,990, F. R. Long (c) $47,000, Nelson & Buchanan (c) $45,697, Owego Bridge Co. (c) $42,700, King Bridge Co. (b) $32,477, (c) $41,448; Illinois Bridge Co. (b) $32,900, Canton Bridge Co. (b) $39,790, Variety Iron Works (b) $32,890, (c) $40,000; Wynkoop-Brawley & Lane, New York, (b—accepted) $31,999.

YORK, PA.—The contract for the Codorus Creek bridge has been let to the York Bridge Co. for $22,490.

BALTIMORE, MD.—Reports state that the B. & O. R.R. Co. contemplate constructing a stone viaduct across the Susquehanna River near Havre de Grace, Md.

WAYCROSS, GA.—Bids are asked until Jan. 10 for building a bridge over Latilla River at Waltertown, bridge to be 100 ft. long, 12 ft. roadway, and an approach of 100 ft. at each end. Bids for wood or steel span. Warren Lott, Chn. Co. Comrs.

JACKSONVILLE, FLA.—Bids are asked until Feb. 1 for constructing the Bridge St. viaduct, as is stated in our advertising columns. The bridge is to be, preferably, of concrete-steel, 840 ft. long and 60 ft. wide, divided into spans. E. B. Pleasant, Ch. Engr. Atlantic Coast Line, R. R., Wilmington, N. C.; Philip Aylett, Bridge Engr. Seaboard Air Line, Portsmouth, Va.

VICKSBURG, MISS.—A number of steel bridges are to be built in the Vicksburg National Park by the U. S. government.

AKRON, O.—Plans for the proposed Mill St. viaduct have been completed and will shortly be submitted to the officials by the various railways crossing that street for their approval. The viaduct will cost about $125,000, and it is hoped to commence work this spring. Plans for the East Exchange St. viaduct are also said to be under way.

CINCINNATI, O.—The board of public service has ordered the preparation of plans, etc., for the proposed $1,000,000 viaduct from Fourth and Pike Sts. to Mt. Adams.——Reports state that there is a probability of the construction of a viaduct from West Crescent Ave. to Wallace St.. The structure proposed is 900 ft. long and from 60 to 80 ft. wide, the cost is estimated at $175,000.

COLUMBUS, O.—The South Side Business and Improvement Association is agitating the question of the erection of a viaduct in South High St., over the Hocking Valley and Ohio Central railroads.

BROOKVILLE, IND.—Bids are asked by the Franklin county commissioners until Jan. 6 for constructing the superstructure of a 40-ft. span steel bridge over Plummer Creek.

MENOMINEE, MICH.—It is said that the intention of the Menominee Sugar Co. to erect a plant on the site of the Ludington, Wells & Van Schaick Co.'s old mill means that a new bridge will be constructed across the river from Menominee to Marinette at that point.

MARSEILLES, ILL.—Mayor G. C. Stebbins writes us that the city will advertise soon for bids for a bascule or lift bridge, 50-ft. span, over the Illinois and Michigan canal.

SENECA, ILL.—According to reports there is a prospect of a $12,000 lift bridge being built over the canal at Main St.

CALEDONIA, WIS.—The contract for a bridge across Root River, in this town, has been let to the Wisconsin Bridge & Iron Co., Milwaukee, Wis., for $3,875.

COLFAX, WIS.—The contract for a 186-ft. steel bridge has been let to the Elkhart Bridge Co., Chicago, Ill., for $3,300.

NORTHPORT, WIS.—J. Wilson, Des. Engr., writes us that bids will be received Jan. 7 for the superstructure of a one-span steel bridge on stone foundations, to be located at Ostrander. The bridge is to be 110 ft. long and 16 ft. wide, and is to cost $6,600. The abutments are to be 100 ft.—50 at each end.

OSHKOSH, WIS.—Bids are asked until Jan. 5 for constructing substructure and superstructure of an iron highway bridge across Sawyer Creek. Frank Monahan, Chn. Bd. Pub. Wks.

GRUNDY CENTER, IA.—Bids are asked by the Grundy county supervisors until Jan. 6 for bridge work. C. E. Thomas, County Audr.

SIOUX CITY, IA.—City Engineer Lewis has been engaged on plans for steel bridges on concrete abutments, to be built over Perry Creek at 3d St. and at the junction of West 3d and 4th Sts.

WATERLOO, IA.—Bids are asked until Jan. 5 for constructing and repairing pile bridges for 1903. Plans and specifications are on file at the county auditor's office.

KANSAS CITY, KAN.—A bill has been before the House of Representatives to grant the Kansas City, Mexico & Orient R. R. authority to construct a bridge over the Missouri River at this city.

KANSAS CITY, MO.—Articles of incorporation of the Kansas City & Clay County Toll Bridge Co. have been taken out. The company proposes to build a bridge across the Missouri River, from Holmes St. to the Clay county side of the river. James Lynn, Wabash, Ind., is one of the incorporators.

FORT SMITH, ARK.—Thos. A. Bayley, Cy. Engr., is reported to be engaged on plans for a bridge over Coche River for the merchants of Spiro.

CASTORVILE, TEX.—We are informed that bids will be received Feb. 10 for the construction of a bridge at this place. The bridge is to be a Pratt truss and camelback on stone foundation. There are to be three spans—one, 252 ft., and two, 100 ft. It is to be 16 ft. wide, and will have a capacity of 80 lbs. per ft. S. A. Oliver & Co., Des. Engr., Houston, Tex.

SAN ANTONIO, TEX.—The council has passed an ordinance, according to reports, requiring the Southern Pacific R. R. to build a viaduct over Walnut St., or any other street selected.

ANADARKO, OKLA. TER.—Bids are asked until Jan. 5 for constructing two steel bridges—290 and 190 ft. long. Dyke Ballinger, Co. Clk.

DENVER, COLO.—Bids are asked until Jan. 15 for constructing bridges upon the big Thompson road. The number and length of proposed structures are as follows: two 100-ft. bridges, two 90-ft., two 85-ft., four 80-ft., four 75-ft., one 70-ft., four 65-ft., two 50-ft., one each of 43, 40, 25, 20 and 15 ft., and five 12-ft. John E. Ramer, Co.Clk.

OREGON CITY, ORE.—Reports state that the plans of the proposed Oregon City & Suburban Railway Co. provide for a suspension bridge at this city, across the Willamette River, to cost $40,000.

SANTA BARBARA, CAL.—The city engineer has prepared estimates for stone bridges, which will cost about $40,000.

BUILDINGS.

(For foreign building operations see under "Foreign Contracts and Export News.")

ROCKLAND, ME.—Bids are asked until Jan. 15 for masonry, carpentry and other work for completing the new library building. Wm. T. Cobb, Pres. Library Trustees.

BOSTON, MASS.—Stephen Brennan has been awarded the contract for constructing the new school building on Huntington Ave., in Roxbury, for $27,600.——The Boston Wharf Co. is to erect a 167 × 51-ft. 5-story wool storage building on Summer St. M. D. Safford, 274 A St., is Arch.

HOLYOKE, MASS.—The Marble Hall Building was damaged by fire Dec. 26 to the extent of $75,000.

BROOKLINE, MASS.—B. M. Dixon, Lewiston, Me., and others, have purchased a site on St. Paul St. and propose to erect thereon a brick apartment house, costing about $100,000.

MELROSE, MASS.—The public library committee, Mayor Larrabee Chn., have selected the plans of Architect Penn Varney, of Lynn, Mass., for the proposed building, which is to cost about $25,000.

NEW BEDFORD, MASS.—The high school commission have decided to have the proposed $500,000 school house on the Morgan lot constructed of a reddish shade of buff brick, with light buff limestone trimmings. The base course will be Rockford granite.

HARTFORD, CONN.—Plans for a 5-story building on Pearl St. for the Hartford Electric Light Co. have been drawn by I. A. Allen, Jr., Arch.——According to reports it is proposed to erect a $150,000 state normal school in the western section of the state. Danbury and Meridan have been mentioned as desirable localities.

NEW HAVEN, CONN.—It is stated that the New Haven County Anti-Tuberculosis Association will proceed to build a complete modern tuberculosis hospital on Woodbridge Heights. Three 8-room cottages will be built at once.

ROCKVILLE, CONN.—The contract for a stone library building here has been let to Frank L. Whitcomb, 166 Devonshire St., Boston, Mass., for about $80,000.

BUFFALO, N. Y.—We are informed that the following men were the lowest bidders for the various work in constructing public school 21: Masonry, cut stone, iron work, plastering and fireproofing, The Niederpruem, Gibbs & Schaaf Co., 547 East Utica St., Buffalo, $20,467; carpentry, painting, etc., Herman Hausman, 52 Tyler St., Buffalo, $10,757; heating and ventilating, Joseph Broonold, 1232 Jefferson St., Buffalo, $9,481; roofing sheet metal work, steel ceiling, Fred. H. Menze, 480 Genesse St., Buffalo, $4,481; plumbing, gas fitting, etc., Barnd & Geigar, 11 Mohawk St., $3,572.

NEW YORK, N. Y.—Plans have been filed by Hohenburger & Straub, Archs., 122 Bowery, for a 6-story brick tenement, 46 × 62 × 89 ft., at 282-84 Broome St., for H. Fine, 369 Henry St., to cost $45,000; by Sass & Smallheiser, Archs., 23 Park Row, for a 6-story brick tenement, 49 × 85 ft., at 312-14 East Eighth St., for J. Katzman, 64 East 102d St., to cost $40,000; by A. Stevens, Arch., 157 East 67th St., for a 3-story brick engine house, at 84-88 Park Row and 8-14 Chambers St., for the city, to cost $85,000; by Horenburger & Straub, Archs., for a 6-story brick tenement, 55 × 86 ft., at 316-20 East 50th St., for B. Levy, 226 Henry St., to cost $40,000; by McKim, Mead & White, Archs., 160 Fifth Ave., for a 3-story brick library, 50 × 75 ft., at 224-26 East 125th St., for the New York Public Library, to cost $65,000; by C. B. J. Snyder, Arch., 500 Park Ave., for a 5-story brick school, 74 × 150 ft., in Elizabeth St., for the city, to cost about $250,000.

NEW YORK, N. Y.—Bids are wanted by the Department of Education until Jan. 5 for the sanitary work and alterations to schools 156 and 90, borough of The Bronx, for installing new baths in the annex to Girls' Technical High School at 146 Grand St.; for installing heating and ventilating apparatus of the addition and alterations to school 89, 134th St., Manhattan. C. B. J. Snyder, Supt. School Bldgs., Park Ave. and 59th St.——Bids are wanted by the Department of Public Charities, foot of East 26th St., until Jan. 8, for alterations to the Cumberland St. hospital. Homer Folks, Comr.——Plans have been completed for new school buildings costing about $1,500,000, for which contracts are to be let in the near future.——It has been announced that a new Wanamaker store will be built on block bounded by Broadway and Fourth Ave., Eighth and Ninth Sts. The structure will be 10 or 12 stories in height, measuring about 400 × 250 ft. and will be connected with the present store owned by John Wanamaker by tunnels under the street.——Plans have been filed for a new theatre at Broadway and Stockton St., Brooklyn, to be built by the Broadway Theatre Co. The auditorium will have a seating capacity of 2,200. The new structure will cost about $100,000. Henry Roth, Nathan Stern, Eugene M. Hendrickson and G. F. Middendorg are directors of the company.——The Long Island R. R. Co. will build a large terminal on the site of the destroyed station in Long Island City. Work has already been started clearing away the debris, and work on a temporary structure will soon begin. Plans for the temporary structure have been filed. President Baldwin states that work on the permanent terminal would probably be started after the completion of the Pennsylvania R. R. tunnel from Jersey City to Long Island City.

NEW YORK, N. Y.—Bids are wanted by the Board of Trustees of the College of the City of New York until Jan. 14, for the terra cotta for the building for the College of the City of New York, to be erected on St. Nicholas Terrace, 140th St. and Amsterdam Ave.; also for the excavation, rock blasting and foundation walls for these buildings. Edward Lauterbach, Chn. Bd. Trustees, 23d St. and Lexington Ave.; Geo. B. Post, Arch., 33 East 17th St.

RENSSELAER, N. Y.—The matter of bonding the city for erecting a city hall and various other improvements is under discussion.

ROCHESTER, N. Y.—Reports state that the old armory may be remodeled at a cost of $50,000 and made suitable for a convention hall. The new armory which is to replace the present structure has already been promised by the state.

SCHENECTADY, N. Y.—The Maxy Block, opposite the Union Station, was damaged by fire recently to the extent of about $100,000; insurance $75,000.

NEWARK, N. J.—Plans have been filed by T. Cecil Hughes, Arch., for the following building work: Two-story brick freight station, Broad and Cross Sts., Lackawanna Railroad owner, estimated cost $50,000; 3-story brick passenger station at Broad St. and Morris and Essex Railroad Ave., estimated cost $75,000.——The county supervisor in his annual message recommends that improvements be made to the county jail and that an additional wing be built to the Overbrook Asylum. The cost of this latter work will be $100,000.

NEW BRUNSWICK, N. J.—Work is to be begun soon on the P. R. R. station at Albany St. and Easton Ave., to cost about $50,000. The station is to be two stories high, of terra cotta brick, with stone trimmings.

BRYN MAWR, PA.—The contract for building Rockefeller Hall at Bryn Mawr College, has been let to John Sweatt & Co., Boston, Mass. A. J. Houghton, Pocantico, N. Y., is supervising Arch.

PHILADELPHIA, PA.—We are informed that the following bids were received Dec. 20 by Maj. Frank Heath, Ordnance Dept., U. S. A., for installing a power plant at

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

the Frankford Arsenal, (a) being bid for complete plant of 250 KW., (b) plant of 200 KW., (c) for complete turbine plant of 200 KW.: Sanson & Rowland, 422 Commerce St., Philadelphia, (a) $60,000, 150 days; Providence Engineering Works, Providence, R. I., (a) $42,500, 250 days; McCay Engineering Co., Baltimore, Md., (a) $35,220, June 1, 1903; D'Olier Engineering Co., 119 So. 11th St., Phila., (a) $37,413, 8 months, (b) $35,757, 8 months, (c) $31,715, 5 months; Stephens & Tyler, Chicago, Ill., (a) $39,943, 8 months, (b) $38,698, 8 months, (c) $38,360, 8 months; David R. Burns, 19th and Brown, Phila, (a) $37,600, June 30, 1903, (b) $36,335, June 30, 1903; M. R. Mickle, 512 Girard Bldg., Philadelphia, (b) $36,118, Aug. 15, 1903. The following bids were received for the boiler plant and for piping plant: Boiler plant: The Moore W. T. Boiler Co., 2227 Wood St., Phila., $13,926; National W. T. Boiler Co., Bourse, Pa., $8,000, June 1, 1903; Babcock & Wilcox, 85 Liberty St., N. Y., $9,512, June 1, 1903; Aultman, Taylor Co., (Cahall Hor. T. Co.), Drexel Bldg., Phila., $9,835, 3 months. Piping plant: Standard Heat & Engineering Co., Lancaster, Pa., $6,997, June 1, 1903; Harris & Alger, 102 Market St., Camden, N. J., $5,829, June 1, 1903.

PHILADELPHIA, PA.—Plans for the proposed $500,000 Elkins Home for Orphans have been completed by Horace Trumbauer, Arch., 310 Chestnut St. The building is to be erected at Broad St. and Bristol Ave.——Plans have been posted by Henderson & Co., Ltd., and Cramp & Co., for a 5-story granite and brick structure, 52 × 160 ft., for a physical laboratory for the bureau of standards in Washington.——Plans and specifications have been in preparation by Stearns & Castor, Archs., for a 2-story stone edifice, to be erected at 8th and Porter Sts., at a cost of $30,000.

PHILADELPHIA, PA.—Ballinger & Perrot, Archs., 12th and Chestnut Sts., have awarded the contract for a 3-story addition to the H. B. Underwood plant, 1025 Hamilton St., to the Angus S. Wade Co., Philadelphia. The building will be 53 × 26 ft.

PITTSBURG, PA.—The Hotel Victoria, F. C. Smith, Prop., according to reports, is to be remodeled at a cost of $250,000.——Homer & Ladley, Arrott Bldg., have been appointed agents for a proposed $500,000 apartment house, to be built in East End, after plans of W. Arthur Thomas, Arch.——Rutan & Russell, Archs., First National Bank Bldg., have been engaged on plans for the proposed 6-story warehouse of the Pittsburg Dry Goods Co., to be built on Penn Ave., at a cost of $250,000.

POTTSTOWN, PA.—Fritz & Klause write us that on account of bad weather the construction of their proposed building will be deferred for some time, perhaps until next spring.

READING, PA.—H. S. Heed, Arch., 536 Penn Ave., will soon start final plans for large additions to a hotel at 405 Penn Ave., for John Barbey.

BALTIMORE, MD.—Cope & Stewardson, Archs., 320 Walnut St., Philadelphia, have been awarded first prize in the competition for the new municipal building.——The contract for the Dime Savings Bank Building has been let to Morrow Bros. The building is to be of brick and marble, 25 × 100 ft., and four stories high. J. Appleton Watson, 5 East Lexingotn St., is Arch.

BALTIMORE, MD.—Paul Enmart, Arch., 206 Park Ave., is said to be taking bids for an addition to the Hotel "Mullin" at Baltimore and Liberty Sts., to be of brick and steel, seven stories high, fireproof construction, and costing about $500,000.

WASHINGTON, D. C.—Bids are asked until Feb. 3 for erecting officers' quarters, contagious disease hospital, and for changing main hospital building at Mare Island. Cal., Navy Yard. A. S. Kenny, Paymaster-Gen., U. S. N.——The New York Continental Jewel Filtration Co., New York, at $97,545, was the lowest bidder for building brick and steel power shop at Charleston navy yard.

PARKERSBURG, W. VA.—The Nash school building was recently destroyed by fire, causing a loss of $50,000.

CHARLOTTE, S. C.—Frank P. Milburn, Arch., Columbia, S. C., writes us that he recently made sketches for a $100,000 hotel for Charlotte people, and expects that the working plans will be ordered at once.

ATLANTA, GA.—Geo. P. Howard is said to be interested in a project for building a 6-story $200,000 apartment house in this city.

LAKE CHARLES, LA.—The Chavvane Realty Co. has been organized with a capital of $60,000 to erect a 100 × 200 ft. brick business building.

NEW ORLEANS, LA.—It is reported that A. Lehmann & Co. will erect a 12-story store building on Canal St.

NEW ORLEANS, LA.—The directors of the New Orleans Cold Storage & Warehouse Co. have decided to double the capacity of the plant recently erected on the block bounded by Front, Gaiennie, Calliope and South Peters Sts. A new building will be erected and bids will be called for in a short time, and the contract be let by May 1. About $125,000 will be spent on the structure.

CHATTANOOGA, TENN.—The Mizpah Congregation, Sol Moyes, Secy., Times Bldg., is advertising for a site, 75 × 125 ft. for the erection of a synagogue.

KNOXVILLE, TENN.—A fire in the business section of this city recently did about $700,000 damage.

NASHVILLE, TENN.—Brown & Brown, Archs., have drawn plans for a 10-story steel building, and it is hoped to enlist capital enough to construct the same.

LOUISVILLE, KY.—Bids are asked until Jan. 14 for the construction of a county court house. Frank P. Milburn, Arch., Columbia, S. C.; H. M. Keasby, County Judge.

CINCINNATI, O.—A $50,000 cement building for the larger animals is to be built at the Zoo, after plans of A. O. Elzner, Arch.

CLEVELAND, O.—The Brooks Co. will erect a 7-story, 38 × 150 ft., brick building on Superior St., at a cost of $60,000.

COLUMBUS, O.—Bids are asked until Jan. 12 for building a four-room school house in Marion township. Lucien Livingston, Clk Bd. of Education, Marion township.

MARION, IND.—Bids are asked until Jan. 19 for constructing a new jail and sheriff's residence. Richards, McCarty & Bulford, Archs., Columbus, O.; Geo. A. Modlin, Co. Audr.

KALAMAZOO, MICH.—Edward C. Van Leyen, Arch., Detroit, writes that the new hospital building for the Kalamazoo Hospital Association will be of the Hennebique system of construction. It will be of brick, concrete and steel, and fireproof; 2½ stories high, 42 × 72 ft., and will cost $15,000.

CHICAGO, ILL.—B. Kuppenheimer & Co. will erect in the wholesale district an 8 or 10-story fireproof building, costing about $200,000.——Marshal Field & Co. have acquired the property at Ellsworth and Polk Sts., and will utilize the same for the site of a new warehouse building. The property is 283 × 186 × 287 ft.——Plans are being prepared by Jenney & Mundie, Archs., for a 12-story building which L. Z. Leiter will erect at 299-301 Wabash Ave. The structure will cost about $200,000.——It is stated that the Oriental Consistory of the Scottish Rite Masons will build a cathedral in this city in the near future and that $300,000 has been already secured for that purpose.——The International Hotel Co. has purchased the Wyoming Hotel at 266-74 South Clark St., and will remodel the building. Plans and details will be completed by the architect, Paul Gerhardt, Schiller Bldg., about Feb. 1 and will call for work costing between $70,000 and $100,000.——Plans are being prepared by Fred. Ahlschlager, Arch., Lafayette Bldg., for an addition to the piano factory at Steger, Ill., for the Steger & Son Mfg. Co. It will be a 3-story brick and stone building, of mill construction, and will cost about $75,000.

EAST ST. LOUIS, ILL.—Plans are being prepared by L. Pfeiffenberger, Arch., First National Bank Bldg., for a 4-story stone and fireproof hotel building, 75 × 150 ft., to cost about $60,000.——The East St. Louis United Presbyterian congregation, recently organized with Rev. C. M. Ritchie as pastor, will soon begin the erection of a new edifice on Washington Place. About $10,000 has already been subscribed.

LINCOLN, ILL.—Competitive plans and specifications with estimates of the cost of constructing a fireproof courthouse for Logan county will be received by the Court House Building Committee of the Board of Supervisors until Jan. 26. The building will be located on a block 320 ft. square, and is to cost complete not more than $125,000. H. F. Purviance, Chn. Bldg. Com.

BLOOMER, WIS.—Bids are asked until Jan. 20 for the erection of a 2-story, 8-room brick school house at Bloomer. Robt. Cottington, Pres. Bd. Education.

MILWAUKEE, WIS.—H. S. Eldred will build a 5-story brick and stone business building on Broadway, near Huron St., to cost $40,000. The contract has been let.——The trustees of the public museum have decided to ask the council for an appropriation of $60,000 for the erection of an addition to the present building.——A permit has been granted to John Hunholz for a 2-story brick and stone apartment building on Grand Ave., between 14th and 15th Sts., to cost $50,000.——The Plankington Estate is having plans prepared for an addition to the building at Fourth St. and Grand Ave., now occupied by the Boston store, to cost about $60,000.

OSKALOOSA, IA.—It is stated that Chas. McCulloch and E. H. Gloss, owners of Hotel Dowling, are preparing plans that contemplate the rebuilding of the property early in the season of 1903. The building is to have a fourth story added and an elevator put in. The improvements will cost about $60,000.

BEATRICE, NEB.—The Beatrice National Bank building was destroyed by fire on Dec. 23, together with a large amount of business property, entaining a loss of $200,000.

LINCOLN, NEB.—The Cudahy Packing Co. has purchased the property at M and Eighth Sts. and will erect early in the spring a wholesale house costing about $60,000.

FARGO, N. DAK.—The Huber Mfg. Co. will erect a warehouse, 200 × 75 ft., and three stories high, in this city, at a cost of $30,000.

ST. LOUIS, MO.—It is stated that the Royal Investment Co. will build 60 flats on Easton and Clara Aves.

ST. LOUIS, MO.—The contract for erecting the Restaurant Pavilions and semicircular colonnade at the St. Louis Exposition, has been awarded to the Goldie Construction Co. at $109,740 for the restaurants, and $59,740 for the colonnades.

BEAUMONT, TEX.—The St. Louis Southwestern Ry. will erect a new passenger station in this city, beginning work soon after the first of the year. About $50,000 will be spent on the building.

DALLAS, TEX.—The Scottish Rite Masons, of Dallas, have secured the property on the southwest corner of Wood and Harwood Sts., 165 × 75 ft., and will construct a Scottish Rite temple thereon, at a cost of about $50,000.

OKLAHOMA CITY, OKLA.—The commission appointed by the Epworth University Commission to select a site has decided upon the location for the proposed buildings. The first to be erected will cost about $40,000.

PUEBLO, COLO.—The directors of school district No. 20 have purchased a site on Grant and Orman Aves., and will erect a high school building costing about $200,000.

SEATTLE, WASH.—Herman Chapin has authorized Boone & Carter to prepare plans for a 4-story brick and stone building, 120 ft. square.——A brick hotel will be erected by J. D. Stimson and A. W. Engle. It will be a 3-story brick, 120 × 115 ft., and will cost approximately $50,000.

SEATTLE, WASH.—C. A. Bebb writes us that the proposed Athletic Club building is to be four stories high, 60 × 128 ft., built of stone, pressed brick and terra cotta. The cost will be $60,000, and it will be heated and lighted from power plants. Bebb & Mendel, Archs.

SPOKANE, WASH.—It is reported that Geo. C. Beck will erect a 2-story brick flat building. The structure will cost about $50,000.

KERN CITY, CAL.—J. Davis presented plans to the town trustees and specifications for the erection of a combined city hall and fire house. The plans were adopted and bids will soon be advertised for.

LOS ANGELES, CAL.—Plans have been prepared by John Parkinson, Arch., for the erection of a $200,000 club house for the California Club on Hill and Fifth Sts. Frank S. Hicks is secretary.

OAKLAND, CAL.—The First Baptist Church have decided to erect a building on Telegraph and Jones Sts. It will be built of rough granite and will cost about $70,000. The auditorium will have a seating capacity of 800.

PALO ALTO, CAL.—Plans and specifications have been accepted by the committee for the erection of a $600,000 library at Stanford University. The structure will be built of buff sandstone.

SACRAMENTO, CAL.—Reports state that the legislature has appropriated $50,000 for the erection of a governor's mansion on the Capitol grounds.

SAN FRANCISCO, CAL.—Press reports state that John Martin, Pres. of the North Shore R. R., is at the head of a project to erect a $250,000 hotel on the old Pixley ranch in Corto Madera.

SAN FRANCISCO, CAL.—Reports state that E. T. Osborn will erect a 5-story apartment house on Pine, near Hyde St., to cost $125,000.

SANTA BARBARA, CAL.—Bids are asked until Jan. 2 for making alterations and additions to the city jail. Alfred Davis, Cy Clk.

SANTA ROSA, CAL.—L. D. Rathborne, Secy. Library Trustees, writes us that the contract for constructing a public library building has been let to Wm. Peacock, San Francisco, Cal., for $19,489.

BOISE, IDAHO.—The erection of a 100-room hotel in this city, to cost $150,000, is contemplated by Hosea Eastman and associates.

VANCOUVER, B. C.—W. T. Whiteway, Molsons Bank Bldg., informs us that the specifications for the fire hall have not been prepared and nothing can be done until after the vote on Jan. 8 by the property owners. The building will be of brick, 70 × 100 ft., and will cost $[illegible].

WATER SUPPLY AND IRRIGATION.

(For foreign water supply and irrigation see under Foreign Contracts and Export News.")

AUGUSTA, ME.—Citizens of Brunswick and Lisbon have petitioned for the formation of a water district to furnish the towns with water.

GARDINER, ME.—The legislature will be asked to grant this city authority to buy the works of the Maine Water Co. S. C. Manley is Pres., Augusta, Me.; Frederic Manforth, Mayor.

RUMFORD FALLS, ME.—Reports state that the introduction of a pure water system is being urged.

WINSLOW, ME.—The legislature is to be petitioned for the right to construct water-works. Josiah W. Hamlin is interested.

AMHERST, MASS.—W. W. Hunt, Supt. Amherst Water Co., writes us that bids will not be received for six months for the proposed extension of water mains.

BROCKTON, MASS.—The contract for the pumping engine for the Silver Lake station has been let to the Barr Pumping Engine Co., Philadelphia, Pa., for $43,500. The contract for 12,000 ft. 24-in. pipe was let to the U. S. Cast Iron Pipe & Foundry Co., Philadelphia, Pa., for $28.40 per ton.

BROOKLINE, MASS.—A committee will report at the coming town meeting favorably to the construction of a new covered reservoir in this town, the estimated cost of which is $75,000.

MANSFIELD, MASS.—The extension of the water system to East Mansfield is being agitated.

CROMPTON, R. I.—The Crompton fire district taxpayers have voted to build a new reservoir, at a cost of $20,000, on Huckleberry Hill. C. D. Robinson is on the building committee.

HARTFORD, CONN.—The water commissioners are to study samples of all the leading styles of meters, as there is some dissatisfaction with those now in use.

NEW BRITAIN, CONN.—The general assembly will be asked to authorize the purchase by the city of the waters of the north branch of the Pequabuck River or its tributaries in the towns of Bristol and Burlington. This new supply will be independent of the proposed reservoir on Wolcott Mountain, which is to cost $75,000.

NEW HAVEN, CONN.—The Trades Council has adopted a resolution protesting against the ratification of the contract recently entered into by the city and the New Haven Water Co.

RIDGEFIELD, CONN.—Reports state that petitions have been circulated asking that the charter of the Ridgefield Water Co. be dissolved by the legislature. It is asserted that neither the pumping facilities nor the water supply is good. The company is capitalized at $50,000.

BINGHAMTON, N. Y.—The question of adopting the meter system is being considered by the water commissioners. It is stated that Superintendent Anderson is in favor of it.

BUFFALO, N. Y.—The aldermanic committee on water has reported in favor of rejecting all bids received for supplying hydrants for the ensuing year, and has authorized the commissioner of public works to buy such hydrants as he may need in the open market.

FULTONVILLE, N. Y.—A contract has been entered into with J. M. Johnson and J. D. Landes for the installation of a new system of water-works.

LONG ISLAND CITY, N. Y.—Of the $513,000 apportioned for water supply improvement but $13,500 will go to Queens Borough. This will be used for improving the various pumping stations.

MIDDLETOWN, N. Y.—A proposition to raise $27,000 additional for completing the water-works extension was recently voted on.

NEWARK, N. Y.—The purchase of the local water plant by the village is agitated.

NIAGARA FALLS, N. Y.—The contract for a water main in Niagara Ave. has been let to Carmine Crogan for $2,198.

OSWEGO, N. Y.—The matter of a water supply from Lake Ontario has been under consideration by the water department. A map of the new construction necessary for this work shows that the intake will be west of Sheldon's point, at a depth of 80 ft. A pipe is to be run up 7th Ave. to West Bridge St., thence to Cayuga and across the river from Cayuga St.

PAINTED POST, N. Y.—Petitions have been circulated asking that an election be called as soon as possible after April 1st to vote on the construction of a municipal water-works system, to cost about $33,000. W. G. Pearsons is one of the village trustees.

WATERTOWN, N. Y.—The city is considering the matter of a water system, and at a recent meeting of the water board four plans for a water supply were presented by City Engineer McComb. John C. Knowlton, Pres. Water Bd., is to appoint a committee to examine filtration plants in other cities.

WHITNEYS POINT, N. Y.—It is reported that the water-works here have been offered to the village for $35,000.

DELFORD, N. J.—The water company has practically abandoned work on the reservoir, after spending nearly $100,000, according to reports. New plans are being prepared.

EAST ORANGE, N. J.—Reports state that the council is to offer the Orange Water Co. $250,000 for its plant and fixtures. J. D. Gedney is Chn. Water Com.

GLOUCESTER, N. J.—An ordinance has been before the city council for water-works, the plans for which, it is said, will be made by John Sweigard & Co., Betz Bldg., Philadelphia, Pa.

HACKENSACK, N. J.—The Bergen county grand jury has found a presentment against the Hackensack Water Co. This presentment charges that no method of preventing the pollution of the water had been adopted. The building of a proper reservoir is recommended, as well as the establishment of a filtration system.

JERSEY CITY, N. J.—The contract for lining the Hook Mountain tunnel of the Jersey City water-works with brick has been let to Harold Bouton for $11,932. The tunnel will be 1,100 ft. long.

ALLENTOWN, PA.—J. F. Witmer, Buffalo, N. Y., has recently given Pres. Kohler of the water board an estimate on the cost of a filtration plant for this city.

DUBOIS, PA.—At the next election a proposition to increase the borough indebtedness $20,000 is to be voted on. The increase is for completing the water supply system from Anderson Creek.

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

LEBANON, PA.—The Heights Water Co. has been incorporated with a capital of $15,000.

McKEESPORT, PA.—The McKeesport water department officials have been considering a proposition to install mechanical filters to purify the city water supply. The cost will be about $100,000. Supt. H. Verner is to give a decision soon.

MEADVILLE, PA.—A resolution has been before the council for reducing the proposed water-works bond issue from $60,000 to $35,000.

MILLVILLE, PA.—Arrangements are being made to build the works for the Millville Water Co. at once, according to reports.

PHILADELPHIA, PA.—The mayor has approved an ordinance to lay water mains in Roobins, Tacony and Wordrall Sts., Frankford, Torresdale and Kensington Aves., and also in Old Front St.

DELMAR, DEL.—Howell & Co., Drexel Bldg., Philadelphia, have applied for a franchise for new water-works in this place.

WILMINGTON, DEL.—The water commissioners are obtaining information on the various methods for a city water supply. A New York firm has recently suggested that such a supply could be obtained from artesian wells.

BALTIMORE, MD.—The water board has approved Engineer Quick's specifications for water meters, and bids for furnishing as many of these as the water department may require during 1903 are asked until Jan. 4. Thos. G. Hayes, Pres. Bd. Awards. It was also voted to increase the number of disk meters to be purchased with the rotary kind.

WASHINGTON, D. C.—Bids are asked until Jan. 28 for filters, pure water reservoir and appurtenances, and cement, as is stated in our advertising columns. Lt.-Col. A. M. Miller, U. S. Engrs.

LYNCHBURG, VA.—M. H. Garland, Cy. Sur., writes us that no further improvements are to be made to the gravity water supply of the city, aside from those mentioned in our issue of Nov. 20.

MORGANTOWN, W. VA.—Senator Stephen B. Elkins and Geo. C. Sturgiss are reported to have bought the controlling interest in the Union Gas & Water Co. It is stated many improvements will be made.

PARKERSBURG, W. VA.—In a letter to Mayor J. W. Vandervost, Senator J. N. Camden states that he thinks an abundant water supply for this city can be obtained from wells sunk into the gravel beds near the Ohio River.

GEORGETOWN, S. C.—Bids are asked until Jan. 16 for boring an artesian well. J. B. Steele, Chn. Bd. Pub. Wks.

MARION, S. C.—The Marion Water, Light & Power Co. has been incorporated with a capital of $100,000. J. W. Johnson is one of the incorporators.

COLUMBUS, GA.—Reports state that the Columbus Water-Works Co. has been placed in the hands of W. S. Greene, Savannah, Ga., as receiver, by the U. S. Court. The bonded indebtedness is $400,000; the capital stock is $200,000, and the value of the property is returned for taxation $124,000.

BIRMINGHAM, ALA.—The mayor has appointed Alderman J. J. Altman on a committee to look into the advisability of a municipal water-works.

BILOXI, MISS.—Bids are asked until Jan. 15 for the purchase of $18,000 of bonds, the proceeds of which are to be used for extending the water-works to the city limits.

MERIDIAN, MISS.—The Meridian Water-Work Co. has made an offer to the city to settle the water-works question by arbitration. The company offers to sell its plant at terms to be agreed upon or to re-establish the system so as to give perfect satisfaction.

SCRANTON, MISS.—The option granted to Dr. L. S. Anderson for the purchase of the electric light and water-works plants and on a franchise for an electric railway has been extended to Jan. 15.

MEMPHIS, TENN.—E. B. Le Baster, Chn. Water Com., writes us that the city has not yet acquired the water company's plant, although a contract of sale has been entered into between the two, on a basis of $1,096,000 in cash to be paid for the plant, property and franchises, etc., the assumption of the Water Co.'s floating debt of $50,000 and the assumption of the company's bonds amounting to $1,250,000, maturing Jan. 1, 1909. The water committee is now at work on the financial plan of this transfer.

COVINGTON, KY.—The Business Men's Club of this city, according to reports, has recommended that the city officials cut off the water supply furnished to Central Covington, Homesdale and Latonia.

BROOKVILLE, O.—An injunction has been issued against this city selling its bonds for works to cost $24,000.

CINCINNATI, O.—The board of public service has granted C. C. Bragg leave to lay certain water pipes, extending the city water service beyond the city limits to property near Evanston and Norwood.

COLUMBUS, O.—Supt. O'Shaughnessy of the water department will, it is said, soon request a bond issue to pay for a new water main on the North Side, to be built at a cost of about $50,000.

HARRISON, O.—An election has been called for Feb. 16 to vote on the issuance of bonds for the purchase of the local water and electric light plants.

SPRINGFIELD, O.—The council has been asked to authorize the purchase of land for completing the supplemental water supply system. About 1,400 ft. of main pipe line will be laid this winter.——The water trustees have also adopted a standard meter, to be furnished by the water-works department and installed by the water-works superintendent.

YOUNGSTOWN, O.—It is stated that Councilman John Brennan will present a resolution calling for a bond issue for a filtration plant, to be voted on at the regular election.

MONTPELIER, IND.—It is reported that capitalists are figuring upon the purchase of the water and electric light plant now owned by the city.

VALPARAISO, IND.—Reports state that the city intends purchasing the water plant now owned by Chicago capitalists. The company has offered to sell the plant for $125,000.

MENOMINEE, MICH.—The council have declined to permit the Menominee Water Co. to extend its works at Poplar Point. The franchise of the company expires April 1, 1905, and the city is considering the question of buying the works. Address Mayor Eidlitz.

MUSKEGON, MICH.—It is reported that additional wells for an increased water supply are being considered. An extra pump is also talked of. Walter Kreuger, Supt.

ALTON, ILL.—A request has been prepared that the federal court authorize Receiver T. A. Taylor, of the water-works company, to make extensions to the system and to improve the fire protection in various parts of the city. S. F. Connor is Chn. County Water Com.

CHICAGO, ILL.—The city engineer in a report, recently submitted, states that about three-fourths of the water pumped from the lake is wasted. To remedy this he recommends that meters be installed. There are now 180,000 taps in Chicago and only 6,730 of these are equipped with meters.

ELGIN, ILL.—The water-works department will ask for an appropriation of $80,000 for the coming year. Only $37,000 of this is for current expenses, the remainder going for work on the new tunnel and shaft system.

GRIDLEY, ILL.—The matter of water-works here is said to be under consideration.

OAKLAND, ILL.—Provision is said to have been made by the city officials for the establishment of water-works here next season.

ARCADIA, WIS.—J. C. Muer, Village Pres., writes us that the water-works for this place are practically finished. The contract for the pipe line was let to J. P. Miller & Co., Chicago, Ill., for $12,300. The steam boilers, two of 60 HP. each, were secured from Kunert Mfg. Co., Watertown, Wis., and the contract for the power house and reservoir was let to C. E. Sweet. Sturtevant & Todd, Chicago, were the designing engineers.

MENASHA, WIS.—Mayor Geo. Banta writes us that the city of Menasha is not considering, and has not considered, the introduction of a water-works system, and that all items to the contrary are mistakes, having probably taken their origin from the fact that the city does contemplate making certain improvements to the streets.

RICE LAKE, WIS.—A committee has been appointed, of which David Drummond, Eau Claire, Wis., is a member, to appraise the local water-works, looking to the purchase of the same by the city.

BURLINGTON, IA.—T. G. Foster, Secy., writes us that the Citizens' Water Co. has bought out Burlington Water Co., and secured a new 20-year franchise from city. The new company will, about Jan. 2, decide on plans for extensions of mains three miles each year, also to purify water by settling basins, subsidence tanks or some other manner. They will buy a new 6,000,000-gallon pump, and will extend the intake 600 or 800 ft. further into river to channel. Frank Lawlor is the Supt.

OTTUMWA, IA.—It is reported that a water company is being formed here which shall include every taxpayer and citizen. By this means the indebtedness which would be incurred for installing a water-works system would be against the taxpayers personally rather than against the municipality, which has already exceeded its constitutional debt limit.

FORT SNELLING, MINN.—Bids are asked until Jan. 15 for constructing pump house and equipment, including pumps and boilers, water tank, trestle and extension of mains at this place. Geo. E. Pond, Ch. Q. M., St. Paul, Minn.

TWO HARBORS, MINN.—Reports state that the Duluth & Iron Range road will put in this winter a new water system at the shop and yards.

AUBURN, NEB.—O. E. Phippenney writes us that nothing has been done as yet in connection with the proposed new water-works.

ALCESTER, S. DAK.—The trustees have purchased three lots, upon which it is proposed to erect a new water-works plant.

WATERTOWN, S. DAK.—H. D. Rice, Cy. Clk., writes us that a special election has been called for Feb. 10 to vote on the question of purchasing the present water-works system.

FARGO, N. DAK.—Reports state that it is either proposed to filter the Red River water or to get a new supply from a lake 35 miles east of here.

DILLON, MONT.—P. F. White, Mayor, writes us that bids will be received about March 15 for the proposed new water-works. The estimated cost is about $60,000. F. C. Kelsey, Salt Lake, Utah, is Des. Engr.

PHILIPSBURG, MONT.—The city has recently purchased the local water-works and will spend $10,000 in improvements.

KANSAS CITY, MO.—The board of public works is considering the proposition of building a new water-works plant in Clay county, and to sell the Turkey Creek and Quindaro plants.

CUERO, TEX.—At a recent election a bond issue was voted for extending and improving the water mains.

SCHULENBURG, TEX.—The contract for a stand-pipe and basis of water-works has been let to the Harry Guenther Foundry, Machine & Supply Co., San Antonio, Texas.

SWEETWATER, TEX.—Water-works for this town are reported to be an assured fact.

ENID, OKLA, TER.—C. H. Sexton, Cy. Engr., writes us that the city will probably buy their own supplies for the proposed water-works extensions and that the work will be done under the supervision of the city engineer.

SAN ANTONIO, TEX.—Bids are asked until Jan. 15 for sinking an artesian well at Fort Ringgold, Tex. John L. Olem, D. Q. M. G.

SHAWNEE, OKLA. TER.—A special election is to be held Jan. 20, at which time bond issues for water-works extensions and a new city hall and jail will be voted on.

EVANS, COLO.—Bids are asked until Jan. 20 for constructing outlet ditch and head gate for the Union Reservoir Co. Jas. L. McCain, Secy.

FORT COLLINS, COLO.—The North Poudre Irrigation Co. and the Poudre Valley Reservoir Co. are reported to have agreed to combine their interests in the Poudre Valley.

WALSENBURG, COLO.—A proposition to issue $60,000 water-works bonds failed to carry at a recent election.

WILBUR, WASH.—The following bids have been received for water-works construction: M. E. & E. T. Hay, $14,998; James C. Broad, $14,865; W. E. Thomas, $15,000; Bell & Price, $15,938.

DALLAS, ORE.—A special election is to be called to authorize the council to condemn land for water-works purposes.

KLAMATH FALLS, ORE.—The Lost River Irrigation Co. has been incorporated to construct an irrigation canal from Big Klamath Lake to Tule Lake, a distance of 40 miles.

MERCED, CAL.—C. E. Moore, Engr., has submitted to the trustees a report on water supply and electric lighting systems for this town. He estimates the cost of a water supply system at $65,000, including pumping machinery, wells and pipe system. The estimated cost of the lighting system is $30,000, plant to consist of a generator and electrical apparatus, boiler and engine.

LOS ANGELES, CAL.—The Palo Verde Irrigation & Improvement Co. has been incorporated with a capital of $25,000. A. G. Hinckley, 15 Fulton Block, is one of the incorporators.

POMONA, CAL.—Petitions are being circulated asking that a special election be called to vote $260,000 of bonds, $150,000 for a municipal water system, $40,000 for a gas plant, $20,000 for a school house north of the S. P. track, $20,000 for a school house south of the track, $15,000 for improving Ganesha Park and $15,000 for a city park.

REDDING, CAL.—The Brandy Creek Water, Light & Power Co. has been incorporated. It is expected that water will be furnished Redding from Brandy Creek by May 1. W. A. Hall is Mgr.

RIVERSIDE, CAL.—The Riverside Highland Water Co. has purchased a tract of water-bearing lands, it is said, to spend about $30,000 in developing the same.

SAN BERNARDINO, CAL.—This city has voted to issue bonds for acquiring a municipal water system.

SANTA BARBARA, CAL.—Reports state that the water commissioners will ask for a $100,000 bond issue for running a tunnel through Santa Ynez Mountains to Mono Creek, in order to increase the water supply.

SANTA ROSA, CAL.—A resolution has been before the council to call a special election to vote $70,000 of bonds for the following improvements: developing present water system and installing pumping plant, $25,000; completing sewer system, $25,000; purchase of parks, $10,000; city hall repairs, $10,000.

WHITTIER, CAL.—A special election is to be held Jan. 27 to vote $15,000 of bonds for enlarging the water system and building a city hall.

BEAVER, UTAH.—Senator A. B. Lewis is said to have in mind a project for constructing a storage reservoir in Minersville Canyon for the storage of the surplus waters of Beaver River. By means of this 4,000 acres will be brought under cultivation and it is also hoped to develop 800 HP. for mining purposes.

PERRY, UTAH.—The Three Mile Creek Irrigation & Water Co. has been incorporated with a capital of $50,000 by Barnard White and others.

FLAGSTAFF, ARIZ.—It has been voted to issue $10,500 of supplementary water-works bonds, but the sewer bond issue failed to carry.

TUCSON, ARIZ.—The extension of the city water mains is reported under consideration.

BOISE, IDAHO.—A contract amounting to about $65,000 for the enlargement of the Phyllis Canal in Canyon Creek has been let by the Pioneer Irrigation District to Farris & Kesl, of Boise.

GRANGERVILLE, IDAHO.—The Central Idaho Water, Light & Power Co., Ltd., has been incorporated with a capital of $100,000, by S. G. Chamberlain and others.

LEWISTON, IDAHO.—A special election will be held Jan. 16 to vote on the issuance of $60,000 of bonds for extending and improving the water-works.

MALAD, IDAHO.—Reports from here state that work on a reservoir to be constructed in Glendale is to be begun soon. The citizens of Preston are pushing the enterprise and propose to raise $70,000 for its construction.

WEISER, IDAHO.—The directors of the Weiser Irrigation District have sold the $60,000 bond issue and will call for bids for enlarging the irrigation ditch.——The supreme court has affirmed the validity of the proposed issue of $40,000 of bonds for the purpose of putting in water-works and an electric light plant.

WHITE BIRD, IDAHO.—Reports state that this place will have water-works and possibly an electric light plant, if the plans of the Central Idaho Water, Light & Power Co. materilize.

BARRIE, ONT.—At the special election Jan. 5 a by-law will be voted upon to borrow $3,000 for extending the water system on Blake, Bayfield, North John and Owen Sts. E. Donnell is Town Clk.

SEWERAGE.

(For foreign sewerage work see under "Foreign Contracts and Export News.")

HUDSON, MASS.—The plans and specifications for the proposed sewerage system are completed, and are now in the hands of a special committee.

WOONSOCKET, R. I.—Frank H. Mills, Cy. Engr., writes us that $5,500 has been appropriated for an additional filter bed, and that the contract for the work will be let this spring.

ANSONIA, CONN.—Alex. Feitch, Supt. of Pub. Wks., writes us that nothing yet has been done towards the proposed extension of the trunk sewer line through the railroad yards.

MERIDEN, CONN.—A local press report states that a sewer on Silver St. is now being discussed by the sewer committee. E. E. Hall is Chairman.

ALBANY, N. Y.—The city authorities are planning upon the construction of an intercepting sewer, which will involve an expenditure of $500,000. It will extend from Tivoli to Gansevoort St., through Broadway. The plans and specifications have been drawn by City Engineer Melius.

BAY RIDGE (L. I.), N. Y.—The board of estimate has authorized the construction of the last section of the big trunk sewer. The estimated cost of this sewer is $285,000.

BROOKLYN, N. Y.—Bids are asked by the Brooklyn Borough President until Jan. 14 for constructing a sewer in Narrows Ave., an outlet sewer in 83d St., also sewers in 88th St. and Shore Road, in all about 710 ft. 30-in. brick sewer, 1,060 ft. 24-in. pipe sewer, 1,420 ft. 18-in. pipe sewer, 58 manholes, besides various other appurtenances. J. Edw. Swanstrom, Pres.

BUFFALO, N. Y.—At a recent meeting of the board of aldermen it was decided to purchase a site for a sewage pumping plant.

CORINTH, N. Y.—It is stated that an election will be held some time in January to vote on the question of a sewerage system that Surveyor Mott is reported to have estimated between $17,000 and $20,000.

FISHKILL LANDING, N. Y.—Edward Roche has been awarded the contract for the construction of a 13-mile sewer, to cost $145,000.

MONTICELLO, N. Y.—T. P. Roosa, Village Pres., writes us that nothing definite has been decided upon the question of sewerage.

MT. MORRIS, N. Y.—It is reported that this place is contemplating the construction of a sewerage system.

ASBURY PARK, N. J.—The W. J. McCloud Construction Co., of Elizabeth, was awarded the sewer contract by the Bradley Beach council. Their bid was $20,863, which is $3,730 lower than the bid presented to the council on Dec. 1.

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

BLOOMFIELD, N. J.—Bids are asked until Jan. 5 for the construction of a sewer on Charles St. The approximate quantities of the work are: 950 ft. of 8-in. pipe, 70 Y-branches on 8-in. pipe, and 3 manholes, complete. Wm. L. Johnson, Town Clk.

SUMMIT, N. J.—The contract for a sewer on Florida Ave. was awarded to John Fitzpatrick at $1,437, his bid being about $8 lower than that of Peter Kearns.

WEEHAWKEN, N. J.—John H. Sullivan, Health Inspector, will submit his report to the county health board Jan. 5 on the Gregory Ave. sewer, when the question of a new sewer will be decided.

ALLENTOWN, PA.—The city council has passed an ordinance providing $500,000 for a sewerage system.

CANONSBURG, PA.—Reports state that Cronan & O'Herron, of Pittsburg, were the lowest bidders for the construction of a 60-in. sewer on Jefferson Ave.; their bid being $2,660.

HARRISBURG, PA.—It is reported that the contract for the Pine St. sewer will probably be awarded to H. Opperman.

HAZLETON, PA.—Reports state that the city council is about to decide on the construction of a stone-arch sewer over Mill Creek. A. B. Celiax, Cy. Engr., has estimated the cost at $8,575.

READING, PA.—E. L. Lindmuth, Cy. Clk., writes us that nothing will be done toward the intercepting storm water sewer in the northeastern part of the city until April.

COLUMBIA, S. C.—The sewerage commission has instructed J. L. Ludlow, Cy. Engr., to draw plans and specifications for a sanitary sewerage system.

KNOXVILLE, TENN.—T. J. Moreland, Cy. Engr., in his report to the council, claims that many new sewers are needed, and that about $80,000 would complete the system.

TOLEDO, O.—Patrick Tansey is the low bidder on sewer No. 874, to be located in Basset St. His bid is $1,746; J. B. McNeill is the next lowest, at $1,784.

YOUNGSTOWN, O.—An ordinance has been passed by the city council providing for the construction of a sewer on Hughes St. Wm. I. Davies, Cy. Clk.

FT. WAYNE, IND.—Bids are asked until Jan. 8 for the construction of sewers on Broadway, Fox and De Wald Sts. A. M. Schmidt, Cy. Clk.

NEW ALBANY, IND.—It is reported that the county commissioners at their next meeting will force the city council to build a sewer from Vincennes St. to Falling Run.

SOUTH BEND, IND.—It is reported that A. J. Hammond, Cy. Engr., is preparing plans and specifications for trunk sewers on the east and west sides of the city.

DELRAY, MICH.—The city council has ordered a sewer laid from St. Clair to South Sts. Engineer McCormick estimates that the work will cost $1,193.

GIBSON CITY, ILL.—O. H. Damon, Mayor, writes us that nothing has been decided upon the question of the proposed sewerage system.

OTTAWA, ILL.—Reports state that Mayor Maloney has appointed six men to circulate a petition on the west side of the city for the construction of a trunk sewer.

ROCKFORD, ILL.—The sewer committee has decided to ask the city council to appropriate $14,000, to be used for the construction of intercepting sewers.

WHEATON, ILL.—It is reported as certain that the new sewerage system will be built next year. M. J. S. Peironnet is Mayor.

ATLANTIC, IA.—The Iowa Engineering Co., of Clinton, has prepared plans for a sewerage system in this place. The estimated cost of the work is $6,436. Mayor McWaid may be addressed.

CEDAR FALLS, IA.—T. R. Warriner, C. E., of Cedar Rapids, has been employed by this city to prepare plans for an extensive sewerage system that is estimated to cost between $100,000 and $200,000.

ST. PAUL, MINN.—It is reported that plans are now under way for the construction of sewers which will cost approximately $250,000.

WICHITA, KAN.—The contract for the storm water sewers has been let to Wynkoff Kiersted, of Kansas City, at $1,300.

CABANNE, MO.—An ordinance has been drafted by the board of public improvements providing for a sewer on Waterman Ave. Sewer Commissioner Hermann has introduced an ordinance for the reconstruction of all sewers between Ninth and Twelfth Sts.

NEWPORT, ARK.—The question of sewerage in this place is being discussed.

FORT CLARK, TEX.—Reports state that $7,000 has been appropriated by the government for the construction of a sewerage system.

TACOMA, WASH.—The contract for the sanitary sewer in Old Town District has been awarded to E. M. More at $2,100.

PENDLETON, ORE.—The sewer committee has been authorized by the city council to have plans drawn for a complete sewerage system.

PORTLAND, ORE.—The contract for the Cook Ave. sewer was awarded to J. B. Slemmons for $69,000. Other bids were: John Kiernan, $82,303; Jacobsen-Blade Co., $81,100; Sweeney & Keating, $77,960.——The city council has decided to construct sewers in Upshur and East 13th Sts.

FRESNO, CAL.—This city, according to reports, intends making extensive sewer improvements.

GRASS VALLEY, CAL.—Sewer Inspector Henrici has discovered that the sewer which was put in four years ago, is defective, and it is probable that the same will have to be replaced.

LONG BEACH, CAL.—City Engineer Foster has prepared plans for the construction of a main sewer on California and Second Sts., running 6,800 ft. west.

MARYSVILLE, CAL.—Marsden Manson, of San Francisco, is in charge of the new sewerage system, which will include a sewage farm. An election will be called for proposed bond issue of $50,000 to cover the cost of the work.

MILL VALLEY, CAL.—It is stated that an appropriation of $6,500 has been made by the city council towards sewerage improvements.

SANTA BARBARA, CAL.—The city engineer has prepared plans and specifications for sewers in Micheltorena St. and one on Castillo St. Estimated cost is $5,179.

VENTURA, CAL.—An ordinance has been adopted providing for a special election on Jan. 26 to vote on the question of a $47,000 bond issue for sewers.

LEWISTON, IDAHO.—A petition is to be presented to the city council asking for a sewer in the eastern part of the city. The system as proposed will be provided with three outlets in the Clearwater River.

HAWKESBURY, ONT.—The contract for the sewerage and water-works system has been awarded to Thomas McLaughlin, of Ottawa.

TORONTO, ONT.—C. H. Rust, Cy. Engr., writes us that nothing will be done for the next three months toward the proposed septic tank and bacteria beds for the sewerage system east of Woodbine Ave.

WINGHAM, ONT.—The council has decided to submit the question of a sewerage and water-works system to the ratepayers at the municipal election in January.

GARBAGE DISPOSAL—STREET CLEANING

ROCHESTER, N. Y.—Bids as follows have been received by the board of contract and supply for the collection of garbage for next year. Chas. W. Hartung, $25,500; Thomas Holahan, $30,000; M. W. Conway, $31,500. The contract was awarded provisionally to Chas. W. Hartung.

TRENTON, N. J.—The American Underwriting Co. has made two offers to Mayor Katzenbach for the collection and disposal of garbage. The first proposition is to dispose of the garbage at a uniform rate of $1.30 a 2,000-lb. ton; this does not include night soil, which will be collected and disposed of for $2.25 per cu. yd. The second plan offers to collect and dispose of all garbage, except night soil, at the rate of $1.75 a ton of 2,000 lbs. and night soil at $2.25 per cu. yd. The matter was referred to P. J. Berry, Chn. Council Police Com.

WILMINGTON, DEL.—The council has granted an extra appropriation for garbage disposal.

CLARKSBURG, W. VA.—It is stated that a council committee, Mayor Crile, Chn., has recommended the construction of Dickson crematory, at a cost of about $4,000.

MILWAUKEE, WIS.—A resolution has been introduced by Alderman T. J. Pringle to transfer the supervision of the local garbage plant from the health department to the board of public works.

FORT DODGE, IA.—Reports state that the council is considering a proposition for the installation of a city garbage plant.

TORONTO, ONT.—A. R. Denison, the architect in charge of the western garbage disposial plant reconstruction at Toronto, reports that $3,000 more is required to complete the work. Of this amount $2,500 is for a new consumer. About $7,500 has already been expended in the work.

STREETS AND ROADS.

(For foreign street and road work, see under "Foreign Contracts and Export News.")

MANCHESTER, N. H.—The board of aldermen, in granting additional track franchises to the Manchester St. Ry. Co., voted to oblige the company to use girder rails and to pave the entire street along lines of improvement.

BOSTON, MASS.—A special committee appointed by Mayor Collins to devise some plan for improving the teaming facilities across the city has decided to widen Atlantic Ave., Causeway St., from Beverly to New Washington, and Exchange St.

BRIDGEPORT, CONN.—It is stated that plans have been made for the paving of East Main and Broad St. City Engineer Scofield has estimated the cost at about $25,000.

BALLSTON SPA, N. Y.—The Saratoga county board of supervisors has authorized good roads appropriations as follows: Ballston Spa and Saratoga Springs, $20,185; Waterford, $5,150; Wilton Highway, $4,960; Mechanicsville and Stillwater, $10,650; Saratoga and Schuylerville, $29,775.

BROOKLYN, N. Y.—Bids will be received by the borough president, J. E. Swanstrom, Room 15, Municipal Dept. Bldg., until Jan. 7 for furnishing and delivering 10,000 cu. yds. of sharp sand and for grading lots on 60th and 61st Sts.

FAR ROCKAWAY, N. Y.—Borough President Cassidy awarded the contract to Jacob E. Conklin to furnish 5,000 cu. yds. of screenings, at a cost of $8,950. The other bidders were: Brown & Fleming, $9,450; W. F. Tuohey, $11,000; Peace Bros., $12,500.

BLOOMFIELD, N. J.—Bids are asked until Jan. 5 for the grading of Walnut St., from Montgomery to the south side of Jerome Pl., and the grading of Jerome Pl., from the said Walnut St. to Berkeley Ave. Wm. L. Johnson, Town Clk.

ORANGE, N. J.—Bids are asked until Jan. 5 for macadamizing, curbing, flagging and reflagging of Fairview Ave. Henry G. Miller, Chn. St. Com.

HAZLETON, PA.—It is reported that the council has decided to pave Wyoming St. City Engineer Celiax has approximately estimated the cost at $9,733.

PHILADELPHIA, PA.—The council has appropriated $80,000 for the repaving of streets for the coming year.

PITTSBURG, PA.—The surveys for the new road which the Jones & Laughlin Steel Co. is to build from Pittsburg to Geneva Harbor, on Lake Erie, have been completed. This road will be used exclusively by the company.

BALTIMORE, MD.—An ordinance has been passed by the city council providing for the grading of Fairmont Ave., between the west side of Grove St. and the eastern city limits. John E. Hussey is chief clerk of the council.

CHARLOTTESVILLE, VA.—At a special election it was voted to issue $80,000 in bonds for street improvement.

FORT MYER, VA.—Bids are asked until Jan. 10 for the construction of a macadam road. Capt. W. F. Clark, Q. M.

PORTSMOUTH, VA.—The following bids were opened on Dec. 22 for street paving with asphalt: Cleveland Trinidad Paving Co., Cleveland, $102,739; Southern Paving & Construction Co., Chattanooga, $89,376; Warren Bros. Co., New York, $90,034; Frank Pidgeon, Saugerties, $114,135; Virginia-Carolina Construction Co., Norfolk, $105,168; Cranford Paving Co., Washington, $137,837; Patterson & Briesen, Baltimore, $114,884. For Bituminous macadam: Warren Bros. Co., $94,164. Granite block: Southern Paving & Construction Co., $88,256; Virginia-Carolina Construction Co., $75,712; Cranford Paving Co., $120,512; Patterson & Breisen, $86,464. Bascom Sykes is city engineer.

AUGUSTA, GA.—It is reported that vitrified brick will be used for paving on Broad St.

CINCINNATI, O.—Bids are asked until Jan. 19 for the improving of Westwood Ave., from Harrison to Quebec Road. Robt. Allison, Pres. Bd. Pub. Service.——Bids are asked until Jan. 6 for the improving of Grandview Ave., from McMillan to its southern terminus. Robt. Allison, Pres. Bd. Pub. Service.

CLEVELAND, O.—Reports state that this city will soon advertise for bids for the paving of 76 streets; this is in addition to the 35 miles for which contracts have already been let. Tom L. Johnson is Mayor.

COLUMBUS, O.—Ordinances were passed by the city council for the issuance of $4,000 bonds for the improvement of Reinhard Ave., between Mohawk and Jaeger Sts.

TOLEDO, O.—The council committee has awarded the contract for the paving of Wayne St., from Walnut Ave. to Detroit Ave., to James F. Lehaney & Co., for $12,829.

NEW CASTLE, IND.—It is reported that in all probability streets surrounding the court house square will be paved this spring.

WASHINGTON, IND.—Among the seven bidders in Greene county, Amos Mussleman and Chas. O. Cronan, of Newberry, were awarded the contract for the construction of the Stockton township gravel roads. The estimated cost of construction was $48,647.

FORT DODGE, IA.—The contract for 29,856 sq. yds. of asphalt paving was awarded by the city council to the Barber Asphalt Co., of Washington, D. C. The paving, together with curbing and guttering, is estimated to cost $71,653. The work will begin in March.

SIOUX CITY, IA.—C. C. Burchim writes us that the city council has passed resolutions for the paving of about six and one-half miles with asphalt, and two miles with brick. J. M. Lewis, Cy. Engr.

WASHINGTON, IA.—Bids are asked until Jan. 15 for 12 blocks of paving. D. C. Kyle, Des. Engr.; Hugh H. McCleery informs us of the above.

DULUTH, MINN.—A petition is being circulated to be presented to the board of public works for the paving of East Superior St.

ST. PAUL, MINN.—It is reported that paving improvements were ordered by the board of public works which will aggregate in cost almost $56,000.

ST. PAUL, MINN.—Local press report states that on Jan. 5 the board of public works will open bids on street paving representing an expenditure of about $75,000. The streets to be paved are Nina from Summit to Laurel, Ninth from Jackson to Summit, and part of Capitol Boulevard.

TOPEKA, KAN.—A petition for the paving of Jefferson St. has been circulated and is ready to be filed with the city clerk.

NEVADA, MO.—Reports state that the city council has decided to pave Cherry St. with vitrified brick or asphalt, about 30,000 sq. yds. J. M. Clark is city engineer.

ST. JOSEPH, MO.—The city council at a recent meeting decided to widen Eighth St. The work will not begin before July.

AUSTIN, TEX.—The question of street paving is now under discussion by the city council.

DALLAS, TEX.—Reports state that the Ross Ave. property owners held a meeting recently for the purpose of considering the paving question. As a result a committee was appointed to go before the council.——The paving of Lamar St., from Commerce to Wood Sts., is also under discussion.

DALLAS, TEX.—Reports state that the county commissioners are in favor of issuing $100,000 in bonds for the building of new works.

FORT COLLINS, COLO.—Bids are asked until Jan. 15 for constructing a county road in Larimer county. John E. Ramer, County Clk.

TACOMA, WASH.—A petition is being circulated for the paving of North St. from Division to 11th St.

SAN DIEGO, CAL.—City Engineer d'Hemecourt has prepared plans and specifications for the improvement of Fifth St. to University Ave.; also Ash St. Estimated cost is $3,923.

SAN FRANCISCO, CAL.—Paving bids were opened by the board of public works. The following were the lowest bidders. For paving Dorland St.: The City Improvement Co., $5,243; O'Farrell St.: Williams, Belser & Co., $2,823; Parnassus Ave.: Williams, Belser & Co., $4,498.

SANTA BARBARA, CAL.—It is reported that the city council has decided to repave East Boulevard at a cost of $25,000.

MONTREAL, QUE.—The finanace committee has appropriated $765,000 for street improvement.

MANUFACTURING PLANTS.

(For foreign manufacturing plants see under "Foreign Contracts and Export News.")

PEABODY, MASS.—The Vaughan Machine Works was damaged by fire on Dec. 26 to the amount of $100,000.

THOMPSONVILLE, MASS.—It is stated that the Hartford Carpet Corporation has acquired 13 acres of land, to be used in connection with the enlargement of its plant. The plant will employ over 3,000 operatives.

WESTFIELD, MASS.—The Planet Mfg. Co. will build a new dye house, stock house and storerooms here.

BINGHAMTON, N. Y.—The Strong Leather Co. has been incorporated and will locate its factory at Bainbridge.

NEW YORK, N. Y.—The 7-story piano factory of Ernest Gabler & Bros., at 214-24 East 22d St., was destroyed by fire on Dec. 22, causing a loss of about $500,000.——Wm. Lane's shoe factory in Second Ave., between 45th and 46th Sts., Brooklyn, was destroyed by fire on Dec. 20. The loss to the building and equipment is reported at $100,000.——The Newhall Engineering Co., Philadelphia, Pa., it is stated, will shortly invite estimates on a sugar refinery in this city. The buildings will include a 9-story filter house, 78×80 ft., an 8-story melter house, 90×81 ft., and a 5-story boiler and engine house, 41×80 ft.

NEW YORK, N. Y.—The 4-story brick and iron building at North 12th St. and Bedford Ave., Williamsburg, was burned last week. The building was used as a candy factory by the Standard Rock Candy Co.

DARBY, PA.—It is stated that the Conroy Mfg. Co. will soon want bids for erecting a new plant at Darby. The main building will be of brick, slow-burning in construction, three stories high; a foundry, machine shop and power plants will also be built. P. J. Conroy is interested.

KENNERDELL, PA.—It is reported that the Kennerdell Sand & Mfg. Co. has been formed by Pittsburg men to develop the glass-sand rock located at this place. A plant having a capacity of 300 to 400 tons per day will be erected at a cost of about $50,000.

MECHANICSBURG, PA.—The D. Wilcox Mfg. Co., care F. E. Wilcox, will soon be ready for bids for additions to its plant here. A new forge shop, 45×100 ft., power house and stock house of brick and steel construction, will comprise the additions, with the necessary complement of machinery and equipment.

PHILADELPHIA, PA.—Bids are reported being taken by the Hall & Kilburn Co., 44 North 6th St., for a new plant at 18th St. and Glenwood Ave., to consist of five buildings of fireproof and slow-burning construction. Lockwood, Greene & Co., 93 Federal St., Boston, Mass., are the engineers in charge.

WILLIAMSBURG, PA.—F. J. Shollar, Arch., Altoona, is said to be preparing plans for a 3-story brick and steel plant to be built by the Williamsburg Paper Mill Co., here, at a cost of $120,000.

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

PHILADELPHIA, PA.—C. E. Shermerhorn, Arch., 430 Walnut St., writes us that the Thos. Kent Mfg. Co. has the plans for its new plant and will have charge of the awarding of contracts. The buildings will be two stories, 250 x 62 ft., and will cost $60,000. The equipment will cost about $25,000.

PITTSBURG, PA.—Reports state that the plans for increasing the production facilities of the United States Steel Corporation include nine new monster furnaces, adding to the annual pig iron production of the company 1,575,000 tons, and costing about $5,500,000. The work will include the doubling of the capacity of the McKeesport works.

BALTIMORE, MD.—The James Robertson Mfg. Co., 827 South Howard St., will soon want estimates on an addition to their plant, at the above location, to be of brick, five stories high, and slow-burning in construction.

McCALL, S. C.—A commission has been issued to the Marlboro Cotton Mills to build a $1,000,000 plant. T. B. Gibson, A. W. Morrison and others, of this place, are interested.

AMERICUS, GA.—Local papers state that the Armour Fertilizer Works will establish a plant here, costing about $150,000, and having a capacity of 20,000 tons annually.

BIRMINGHAM, ALA.—The Valley Iron Co. will erect a new furnace at Valley Head, Ala., and J. W. Dowling, formerly in charge of the Bessemer furnaces of the Tennessee Coal, Iron & R. R. Co., will have charge of the erection of the plant.

EASLEY, ALA.—The Southern Car & Foundry Co. will erect a new plant here, according to reports, for the manufacture of steel cars exclusively. The new plant will cost about $250,000, and will employ some 1,000 men.

MEMPHIS, TENN.—It is reported to have been announced by J. M. Hansen, Pres., that $30,000 will be spent by the Southern Car & Foundry Co., on the enlargement of its plant here.

MEMPHIS, TENN.—A charter will soon be taken out by a company which proposes to build a compress plant here, with a capital stock of $100,000. A large tract of land has been purchased in the southern part of the city and will be used as the site for the plant. W. A. Percy, Memphis; Furgus Reid, Norfolk, and Lewis A. Burleigh, Augusta, Me., are among those interested.

NASHVILLE, TENN.—The Elk Valley Tannery has filed articles of incorporation in Tennessee with a capital stock of $50,000, and will build a plant in Elk Valley, Anderson county, on the K. & O. branch of the Southern Ry.

LOUISVILLE, KY.—The plant of the Snead Architectural Iron Works, Louisville, having been almost entirely destroyed by fire on the morning of Dec. 20, that company is anxious to receive catalogues of all tools and machinery used in their business.

VALLEY STATION, KY.—Dr. S. S. Foss, Valley Station, writes that the plans for the proposed new Portland cement plant here have not yet been decided on. A fireproof plant with a daily capacity of 550 barrels, and costing $175,000, will be put up. Dr. Foss is desirous of communicating with firms that could build the works.

BEDFORD, O.—The Bedford Steel Co. has been organized, and will purchase 400 acres of ground in this place, upon which will be erected a large steel works.

BEDFORD, O.—The Bedford Steel Co. has purchased about 400 acres of land in this town, and will establish a large steel works, according to reports. The company was recently organized with $300,000 capital stock. C. A. Klempf, Paul Schneider and the members of the engineering firm of Kaltenback & Griess, of Cleveland, are interested.

BELLAIRE, O.—The plant of the Enamel Brick & Tile Co. was destroyed by fire on Dec. 23.

CANAL DOVER, O.—It is reported that a new sheet steel mill to cost over $135,000 will be built here in the near future on the site of the plant of the American Sheet Steel Co., which was destroyed by fire a few weeks ago. The new mill will be built entirely of structural steel and firebrick and will be absolutely fireproof.

FOSTORIA, O.—The Fostoria Glass Specialty Co. will rebuild its plant destroyed by fire, a short time ago. A temporary structure will at first be put up.

TOLEDO, O.—Mueller & Mildner, Archs., 313 Ferguson Bldg., Detroit, Mich., have about completed plans for a 5-story, 120 x 100 ft., brewery for the Home Brewing Co., L. Schwamm, Mgr., in this city. The plant will be fireproof throughout, and will be equipped with a steam elevator, two 125-HP. boilers, two 35-ton ice machines, engines, pumps, etc. The cost will be about $45,000.

CORYDON, IND.—The Corydon Canning Co. has been organized by the farmers and business men of this vicinity with a capital stock of $10,000, and will at once erect a factory to can vegetables. Dr. T. J. Van Hook is Pres., and Frank Self, Secy.

MUNCIE, IND.—The Cincinnati, Richmond & Muncie R. R. Co. is reported to have decided to locate its repair shops in this city. It is expected that the proposed works will cost about $100,000, and will employ some 350 mechanics.

DETROIT, MICH.—Stevens & Blume, Archs., of this city, are completing plans for the plant to be built by the Sheffield Car Co., at Three Rivers. The building will be 90 x 250 ft., one and two stories high, fireproof, of brick and steel construction.

GRAND HAVEN, MICH.—Plans have been completed by M. J. Moorehouse, Arch., 279 Dearborn St., Chicago, for the new plant which the Challenge Machinery Co. will build in this city. The buildings alone will cost $40,000, and the erection of the same will be started immediately.

CHICAGO, ILL.—The Hine Bros. Co. has bought 3½ acres of land at Ashland Ave. and the south branch of the river, and will use the site for a soap and tallow factory.

PEORIA, ILL.—The National Cereal Milling Co., organized a short time ago with a capital stock of $1,000,000, will erect large corn and oat mills at Peoria.

APPLETON, WIS.—It is stated that O'Keefe & Ortison, Hydraulic Engrs., are preparing plans for a barytes (lime crystal) mill in West Virginia, where a water-power development scheme will also be carried out. The plans contemplate the building of a dam which will develop about 1,800 HP.

MILWAUKEE, WIS.—A plant will be built by a company being organized and financed by B. L. Worden and C. J. Allen here, for the manufacture of structural iron and the construction of bridges. The capital stock will be $100,000.

DUBUQUE, IA.—The Union Electric Co. will expend $250,000 on the construction of a plant here for manufacturing electric apparatus.

ST. JOSEPH, MO.—The International Distilling & Cattle Feeding Co. has purchased about 200 acres of land adjoining South St. Joseph, and will erect a distillery with a capacity of 30,000 bushels of corn a day. It is said that $2,000,000 will be spent on the plant.

ST. LOUIS, MO.—The Loose-Wiles Cracker Co. will build a $500,000 cracker factory in this city, according to a statement reported to have been recently made by J. S. Loose, of Kansas City.

EL PASO, TEX.—Local papers state that the Ready Pay group of mines owned by the Hillsboro Gold Mining & Milling Co. will soon put in a smelting plant. Dr. G. Brower, Utica, is President; and E. H. Wilson, 80 Broad St., New York, Treas.

SEATTLE, WASH.—It is reported in local papers that the U. S. Blow Pipe & Hydraulic Works, of San Francisco, Cal., will erect a factory in South Seattle. The factory will be equipped with hydraulic riveted pipe for irrigation and hydraulic purposes.——The Northwestern Steel Co. has been incorporated by Wm. Piggitt and D. E. McLaughlin, Tacoma, with a capital of $150,000. The object of the company is to establish a large rolling mill south of the city. The principal product will be iron and steel bars.

TACOMA, WASH.—The chamber of commerce is working to secure the establishment of a car-building works here.

OAKLAND, CAL.—H. I. Clay, who has been granted a franchise for operation of meat-packing establishment in Emeryville, will first erect a slaughter house, to cost about $40,000. This will be followed by a cold storage and refrigerating plant.

PRESCOTT, ARIZ.—H. G. Clarke, of the Rigby Mining & Reduction Co., Denver, Colo., has returned to this city from Mayer, where he had been making surveys of a site and preparing plans for the erection of a 100-ton mill. It is said that contracts for the construction of the plant will soon be let.

MISCELLANEOUS CONTRACTS.

(For foreign miscellaneous contracts see under "Foreign Contracts and Export News.")

PARK.—Norfolk, Va.—The consolidated park committee is said to have under consideration the establishment of a park on Smith's Creek.

MINING.—Kern, Cal.—Reports state that the Boston & Kern River Mining Co. will erect a mill and cyanide plant; electric power will be used.

PARK IMPROVEMENTS.—Pawtucket, R. I.—An appropriation of $5,000 for the improvement of Doggett Park has been before the council.

CANAL.—Boston, Mass.—B. J. Berry has petitioned the legislature for the right to construct a canal across Cape Cod by the Bass River route.

PIPE LINE.—Cumberland, Md.—It is said that New York capitalists are planning to pipe natural gas from Weston, W. Va., to this city.

JETTIES.—Los Angeles, Cal.—Bids are asked until Jan. 15 for completing jetty, San Diego Harbor, Cal. Capt. Edgar Jadwin, U. S. Engrs.

MARINE RAILROAD.—Cape May, N. J.—It is reported that the Cape May Real Estate Co. proposes to build a marine railway at East Cape May.

COAL LAND.—Degman, W. Va.—The J. W. Guffey Coal Co. has completed a survey of 6,000 acres of coal land near this place, which it expects to develop.

SMELTER.—Nevada, Cal.—The New York & Nevada Copper Co., operating in White Pine county, will, according to reports, erect a smelter on Murray Creek.

STREET REPAIRING MACHINE.—Trenton, N. J.—It is reported that asphalt repairing machinery is to be purchased for the street department. John Ginder is St. Comr.

TELEPHONE SYSTEM.—Hebron, Neb.—A franchise to operate a telephone system has been granted to C. M. McNeill, Beatrice, Neb., and W. G. Francis, Kansas City, Mo.

ELECTRIC ROCK DRILL.—National City, Cal.—The Sweetwater Water Co., H. N. Savage, Ch. Engr., desires to communicate with manufacturers of electric rock drills.

CENTRIFUGAL PUMP.—Portland, Ore.—The commissioners of the port of Portland will receive bids until Jan. 3 for the construction of a 20-in. centrifugal pump.

PARK WORK.—Providence, R. I.—A resolution has been before the council to hire $44,000 for the purchase of 62 acres of land at Neutaconkanut Hill for public park purposes.

WHARF WORK.—Bangor, Me.—It is reported that the Maine Central completely rebuilt the wharf at Bar Harbor and will also make repairs and alterations to the one at Mt. Desert ferry.

BREAKWATER.—Newport, R. I.—Bids are asked until Jan. 30 for constructing breakwater at Point Judith, R. I., as is stated in our advertising columns. Maj. Geo. W. Goethals, U. S. Engrs.

PARK WORK.—Baltimore, Md.—Designs for the proposed Wyman Park have been submitted to Mayor Hayes by R. Brent Keyser and F. M. Jencks, of the trustees of John Hopkins University.

WATERWAY.—Beaufort, N. C.—U. S. Engineers have been engaged on surveys for a proposed new waterway from Chesapeake Bay, through the Dismal Swamp to the North Carolina Sound at this city.

MINE HOISTS AND DRILLS.—Spokane, Wash.—It is reported that new mine hoists and drills are to be installed in the Homestake Mine the coming spring. J. K. Riorden is one of the stockholders.

GUN FORGINGS.—Washington, D. C.—Bids are asked until Jan. 7 for furnishing 25 sets of gun forgings of various calibers from 4 ins. to 13 ins. Charles O'Neil, Ch. Bureau of Ordnance, Navy Dept.

LEVEE.—Des Moines, Ia.—Citizens residing in the southeast part of the city are asking that about $3,000 be spent next season in rebuilding the levee between Court Ave. and the East 6th St. bridge.

DREDGING.—St. Augustine, Fla.—Bids are asked until Jan. 26 for dredging in St. John's River, Fla., or for hire of dredging plant, as is stated in our advertising columns. Capt. Francis R. Shunk, U. S. Engrs.

COAL WASHER.—Bozeman, Mont.—The Northern Pacific, according to reports, will build a $40,000 washer at Mountainside, near Chestnut, with a capacity of 250 tons of coal a day. Geo. White is mine superintendent.

TELEPHONE LINE.—Hamilton, Mont.—The Bitter Root Telephone Co., of which Senator H. L. Myers is an incorporator, has asked for a 50-year franchise. It is proposed to construct a line from Bitter Fork to Idaho.

DRAINAGE WORK.—Walnut, Ill.—Bids are asked until Jan. 8 for enlarging the main ditch in Union drainage district No. 1, as is stated in our advertising columns; about 655,000 yds. excavation. P. C. Knight, Engr.

NEW TOWN.—Pittsburg, Pa.—The Pittsburg Terminal Railroad & Coal Co., according to reports, is to establish a model town in Bethel, Charles Donnelly, Vice-Pres., having already purchased a tract of 160 acres on the Ward farm. The company also proposes to locate its shops at that place.

FIRE PROTECTION SYSTEM.—Bisbee, Ariz.—Alderman Warner was appointed to a committee to ascertain the cost of tanks and pipes for a better system of fire protection. The cost of the entire system is estimated at $15,000.

STEAM HEATING APPARATUS.—Washington, D. C.—Bids are asked by the supervising architect until Jan. 27 for furnishing the low-pressure steam heating apparatus, etc., complete in place, in the U. S. post office, Creston, Ia., as stated in our advertising columns.

PARK IMPROVEMENT.—Pomona, Cal.—The committee on the improvement bond proposition have recommended that $15,000 of the proposed bond issue go for the improvement of Ganesha Park and $12,500 for the Second St. Park.

CEMENT.—Providence, R. I.—The board of public works has let a contract to H. R. Horton Co. to furnish not over 7,000 bbls. Rosendale cement, and to Fred. E. Shaw Co. for furnishing not over 5,000 bbls. Portland cement.

PAVILION AND PARK WORK.—New York, N. Y.—Bids are asked until Jan. 8 for erecting pavilion in Wm. H. Seward Park; also for constructing Thomas Jefferson Park. Wm. R. Willcox, Park Comr., Fifth Ave. and 64th St.

TELEPHONE SYSTEM.—Jacksonville, Fla.—This city, according to reports is to be connected with Kinston by a telephone system, which is to be established by W. J. Grantham, Catherine Lake, N. C. The line will be about 40 miles long.

DRAINAGE.—Jacksonville, Fla.—A Brevard county company have petitioned the secretary of war for the privilege of constructing a drainage ditch from Lake Washington eastwardly to Eau Gallie Creek, a distance of about ten miles.

BULKHEAD.—Philadelphia, Pa.—Bids are asked until Jan. 29 for constructing bulkhead in Delaware River, between Edgemoor and mouth of Christiana River, as is stated in our advertising columns. Lt.-Col. C. W. Raymond, U. S. Engrs.

PIER WORK.—New York, N. Y.—The contract for removing two piers and building new wooden pier, with appurtenances at the foot of East 86th St., has been let to Bernard Rolf at $1.60 per cu. yd. for dredging and $16,333 for building the pier.

RIVER IMPROVEMENT.—Madison, Wis.—Steps have been taken and money subscribed, according to reports, for the widening and deepening by dredging of the Yahara River. The project was launched by the Madison Pleasure Park and Drive Association.

CANAL WORK.—Glens Falls, N. Y.—Reports state that the sum of $23,000 is to be spent on repairs to the Glens Falls feeder of the canal. The work is to be done under the supervision of Superintendent Patrick O'Grady, and will not be let out to contract.

DREDGING ST. CHOIX RIVER.—Calais, Me.—A movement is on foot to secure joint operations by the United States and Canada for the dredging of the St. Croix River, so as to open it to navigation all the year round from the bridge here to Milltown, N. B.

FORTIFICATIONS, ETC.—Washington, D. C.—According to reports the House Committee on Appropriations will be asked for $2,000,000 for sites for new fortifications. Of this sum the greatest part will be used on Long Island for the protection of Ambrose Channel.

SUBMARINE CABLE.—New York, N. Y.—Bids are asked by the Chief Engineer and Superintendent of Repairs, Post Office Bldg., until Jan. 5 for laying a submarine cable for telephone and telegraph purposes between U. S. Barge Office and Ellis Island.

PARK WORK.—Muncie, Ind.—The sum of $7,000 has been placed in the hands of a special council commitee for beautifying the 100-acre park donated to the city by Geo. F. McCulloch. The conversion of three uptown school yards into small parks is also favored.

PIPING.—Raubsville, Pa.—Bids are wanted for erecting piping from boiler to engines at the new power plant for the Doylestown St. Ry. The plant consists of three 500-HP. boilers and two 400-KW. generators. Boilers are now in place. F. D. Herbert, Engr., 220 Broadway, New York.

NATIONAL PARK.—Ottawa, Ont.—Plans for a proposed National Park, as suggested by the Ottawa Improvement Association, have been filed with the government. It is proposed to have a park of over 800 acres area, and options on nearly all the desirable property are said to have been secured.

RIVER IMPROVEMENT.—Sacramento, Cal.—In a report a special committee of the California River Improvement Association recommended that a cut through Sherman Island be made as the best method of handling the flood waters of the Sacramento. T. H. Sullinger, Grimes, Cal., was secretary.

RETAINING WALL.—Rochester, N. Y.—City Engineer Fisher has been in communication with the Erie R. R. officials regarding the retaining wall on the west bank of the Genesee River, from near Clarisa St. to the dam above Court St. bridge. The cost of the work is estimated at $30,000 or $40,000.

SHIP CANAL.—Buffalo, N. Y.—Maj. Thos. W. Symons, U. S. Engr., has received orders from the secretary of war to make a detailed survey and estimate of the cost of constructing a deep ship canal from headwaters of the Niagara River, parallel with the river, to the lower river, a distance of about 15 miles.

SMELTER PLANT ENLARGEMENT.—Denver, Colo.—Reports state that if W. K. Johnson is successful in his endeavor to secure an extension of his lease of the Rocky Mountain Smelter at Florence, he will make many improvements to the plant and start active operations soon after the first of the year.

AQUARIUM, ETC.—Chicago, Ill.—It is stated that $6,000 is to be spent by Chicago University for the establishment of a fresh-water aquarium in Hull Court. A system of gardens for the improvement of the campus will also be started next spring, $15,000 having already been donated for this improvement.

RIVER WORK.—Chicago, Ill.—The engineering committee of the Sanitary board has ordered the widening and straightening of the north branch of the Chicago River, from Belmont to Lawrence Ave. The plan contemplates a channel 90 ft. wide and 8 ft. deep. The cost is estimated at $700,000 and work is soon to be begun.

STEAMBOAT.—Vicksburg, Miss.—The Merchants' & Planters' Transportation Co., Vicksburg, Miss., has been organized to run a boat in Yazoo River and its tributaries, including Big Sunflower and Tallahatchie River. The company will purchase or construct a light draft boat for this trade. C. J. Searles, Vicksburg, is interested.

GRADE CROSSING ELIMINATION.—Cleveland, O.—Legislative authority has been granted and, it is said, that work will be begun in the spring to do away with 134 grade crossings in this city. The estimated cost of the work, which will be equally shared by the railroads interested and the city, is $10,000,000. The following rail-

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

roads are concerned: Nickle Plate, Wheeling & Lake Erie, Pennsylvania, Lake Shore, Big Four, Erie, and the Cleveland Terminal and Valley.

DRAINAGE.—Pekin, Ill.—A hearing is set for Feb. 2 on the petition of Joseph Daly for a Spring Lake drainage and levee district in Tazewell county. About 15,000 acres will be included, and it is proposed to build a 14-mile long dike and a 12-mile main drainage ditch, with numerous side ditches. There will also be two or three pumping stations.

NAVAL STATION.—Newport, R. I.—Reports from here state that much money will be asked in the next naval appropriation bill for improvements to the station at this point. About $300,000 will be asked for new barracks; appropriations will also be needed for the purchase of 150 acres of land at Coddington Point and for several training ships.

SUMMER RESORT.—Nantucket, Mass.—Reports state that the Nantucket Steamboat Co. will spend hundreds of thousands of dollars in converting into a place of amusement the tract of land lying between the Nantasket pier and the Rockland house. It is proposed to lay out this section in avenues, on which first-class places of entertainment will be erected.

BROOK DEEPENING, ETC.—Boston, Mass.—Hearings have been held by the Metropolitan water board regarding the proposed deepening and widening of Spot Pond Brook. The estimated cost of the work is about $300,000, and it is proposed to enlarge the brook sufficiently to protect the surrounding district from overflow at all times. It will also drain the extra drainage area.

ASPHALT AND COAL DEPOSITS.—Washington, D. C.—Joseph H. Taff, U. S. Geological Survey, has been detailed to furnish advice in the selection of coal and asphalt lands in the Choctaw and Chickasaw territories. By an agreement between the United States and these two nations, the coal and asphalt deposits and lands, not exceeding 500,000 acres, are to be segregated and sold.

HARBOR IMPROVEMENT.—Cincinnati, O.—Reports from here state that the government engineers will recommend that the proposed harbor protection dam be located at Medoc Bar instead of at Cullums Ripple. It is said, moreover, that the erection of wing dams at this latter place will be recommended. The dam, for which Congress appropriated $1,050,000, will be patterned after the Davis Island dam at Pittsburg.

RICE PLANTATION.—Dixon, Ill.—The Goldern Meadow Development Co., Ltd., of which Chas. L. Rogers is a member, has purchased 24,100 acres of land along Bayou Lafourche, in Louisiana. The company proposes to operate a rice plantation and will erect rice mills, etc., for the preparing that product for the market. The contract for the irrigation works and canals has been let to Bancroft, Ross & St. Clair, New Orleans, La.

PARK.—Los Angeles, Cal.—In his annual report, the superintendent of parks has suggested that efforts be made the coming year to establish a park of not less than 200 acres in the southwestern portion of the city. It is said that the stockholders of District Agricultural Association No. 6 are willing to sell Agricultural Park to the city for $200,000, and that all the arrangement have been made and now await only the action of the city council.

LOCKS AND DAMS.—Mobile, Ala.—We are informed that the following bids were received Dec. 23 for building locks and dams Nos. 1, 2 and 3, in Warren and Tombigbee Rivers, as advertised in Engineering News: The New York Continental-Jewell Filtration Co., 15 Broad St., New York, lock 1, $307,970; 2, $231,273; 3, $252,666. Union Development & Construction Co., Ltd., 207 Hennen Bldg., New Orleans, La., lock 1, $314,103; 2, $244,699; 3, $254,726.

DRAINAGE WORK.—Chicago, Ill.—It is stated that the legislature at the coming session will be asked to annex to the Chicago drainage district that part of the Calumet region which lies in Illinois. This is to be done in order that a final reversion of the waters of the Calumet River and the construction of an 18-mile channel to the Sanitary Canal may be accomplished. The cost of building this channel has been itemized by Chief Engineer Isham Randolph as follows: Excavation, $8,863,820; right of way, $472,534; bridges, $1,943,500; guard locks, $600,000; total, $11,879,854.

MODEL SETTLEMENT.—Plainfield, N. J.—Over a million dollars, it is said, will be spent in establishing a model settlement in the western section of this city, similar to that in Overbrook, Pa. Four blocks are to be devoted to this purpose and the syndicate, which is headed by Herbert M. Taylor, of New York, will install its own water-works and electric light station, as well as a central heating plant. No dwelling is to cost less than $10,000 and negotiations are now on between Mayor Olin L. Jenkins and the company regarding the macadamizing of the streets abutting on the plot.

SNAGBOAT, BARGE, ETC.—Montgomery, Ala.—We are informed that the following bids were received Dec. 16 by Lt. R. R. Raymond, U. S. Engrs., for building snagboat, barge, towboats, etc., as advertised in Engineering News: (1) being bid for towboat, (2) for two river barges, (3) barge with sand pump, (4) two dump scows, (5) snagboat, (6) barges: Elliott Machine Co., Baltimore, Md., (3) $14,900. A. Kling, Mobile, Ala., (1) $22,000; (2) $9,000; (3) $14,900; (4) $8,800; (5) $8,700; (6) $3,400. M. A. Sweeney Shipyard & Foundry Co., Jeffersonville, Ind., (1) $20,700; (2) $8,000; (3) $12,900; (4) $7,600; (5) $7,460; (6) $2,960. E. J. Howard, Jeffersonville, Ind., (1) $20,400.

HARBOR IMPROVEMENT.—Tacoma, Wash.—A special committee on harbor improvements, O. B. Hyde, Chn., of the Chamber of Commerce, in their report favor the diverting of the Puyallup River. Should this not be done, however, another alternative is suggested—that of dredging the river. The cost of the improvements is given in the report as follows: Cost to county—Dredging a new channel for the Puyallup River, $250,000; right of way, etc., dredging still water channel in the abandoned Puyallup waterway, $600,000; Wapato Creek waterway to high tide, $400,000; other two waterways, $500,000. Cost to government—Improving Puyallup River, present channel, $400,000; Hylebos Creek, $350,000; Wapato Creek, $425,000; other two waterways, $500,000.

U. S. POSSESSIONS AND CUBA.

GAS SYSTEM.—Honolulu, H. I.—W. W. Diamond, it is reported, will commence work on the laying of pipes for the gas system here as soon as the franchise is granted.

STAMP MILL.—Alaska.—Reports from Juneau state that the Alaska-Juneau Gold Mining Co. has secured ground for mill sites in Silver Bow basin, and has perfected arrangements for the erection of a 100-stamp mill.

MATERIAL.—Cienfuegos, Cuba.—Reports state that H. J. Reilly, 72 Trinity Place, New York, it is said, will soon be ready to contract for the structural material, pipe, machinery, etc., in connection with the market building, water-works and sewerage system to be built at Cienfuegos. The work will entail an expenditure of about $4,000,000.

STEEL DRY DOCK.—Cavite, P. I.—Bids are reported wanted by Mordecai T. Endicott, Ch. Bureau Yds. and Docks, Navy Dept., Washington, D. C., until March 14 for the construction of a steel floating dry dock for the U. S. Naval Station at Cavite.

WATER-WORKS.—Hilo, H. I.—The following bids were received on Dec. 4 for the construction of the Hilo water-works and reservoir: W. Conradt, $15,945; James D. Lewis, $12,697; L. L. Robertson, $11,975; Lord & Belser, $11,173; Whitehouse & Hawhhurst, $9,750 (accepted).

FOREIGN CONTRACTS—EXPORT NEWS.

FORTIFICATIONS.—London, Eng.—Reports state that the government is planning to build fortifications for the protection of London.

RAILWAY TOOLS.—Italy.—The Sicily Railway Co., Rome, wants tenders for tools and small pieces in iron for the year 1903.

RAILWAY.—Russia-Persia.—In the early part of 1903 will be commenced a new line of railway from Erivan in Russia to the Persian frontier.

REPRESENTATION.—Poland.—A. M. Haufblum, Dluga, 38, Warsaw, Poland, is reported to be desirous of representing American manufacturers at Warsaw.

PUBLIC WORKS.—Germany.—The municipality of Berlin has decided to raise a loan of 228 million marks for the carrying out of sundry public works in the German capital.

MUNICIPAL LIGHTING.—Guayaquil, Ecuador.—Bids are wanted by the secretary of the municipal council until Feb. 12 for the lighting of this city by gas or electricity.

STEEL PLANT.—Monterey, Mex.—It is reported that the Monterey Iron & Steel Co., which concern is completing a $10,000,000 plant in this city, will add a Bessemer plant, costing about $300,000.

RAILWAY MATERIAL.—Austria.—The administration of the Austrian State Railways has apportioned a sum of 11,047,000 crowns for the purchase of railway rolling stock and new rails during the year of 1903.

TELPHERAGE.—Natal, So. Africa.—It is reported that the wharfmasters of the Port of Durban will recommend to the Port Advisory Board, that a system of telpherage be installed for the handling of cargo, etc., in Durban.

WATER-WORKS.—Milton, Eng.—Bids are asked until Jan. 15 for the construction of a water-works, including pumping station and wells, near the high road from Sittingbourne to Frinstead. John Dix, Jr., Clk. Council.

RAILWAY.—Chili, S. Am.—A report from Santiago de Chili states that an American syndicate has presented a proposal to build the Chili section of the railroad across the Andes at a cost of $7,000,000, payable in 5% bonds.

CEMENT WORKS.—Monterey, Mex.—The Mexican government is reported to have granted a concession to Alberto C. Cardenas for the establishment of one or more cement factories at San Nicolas Ridalgo. Work will begin at once.

ELECTRIC RAILWAY.—Portuguese East Africa.—Macartney, McElroy & Co., London, Eng., is reported to have obtained a contract for the construction of an electric railway at Lorenzo Marquez, P. E. A., at a cost of about $500,000.

ELECTRIC RAILWAY.—Kong Kong, China.—Reports state that the Electric Traction Co., of Hong Kong, Ltd., has been floated on the London market with a capital of about $1,025,000, with a view to the building of an electric traction railway in Hong Kong.

RAILWAY.—Congo.—Commander Jacques, of the Belgian engineers, left Antwerp for the Congo on Nov. 22 to survey a new railway to be constructed by the Katanga Comite, Brussels, between the Rhodesian frontier and Lake Kinsoli, a distance of 460 miles.

ELECTRIC SUPPLIES.—Brazil.—The Brazilian government is reported to have commanded that all steamers navigating the Amazon River (about 500 in all) be equipped with electric light projectors to obviate collisions. These apparatus must be from two to five kilos.

MACHINERY.—Belgium.—F. L. Bossut, No. 30 Rue du Pelican, Brussels, is reported to want information concerning American machinery for the manufacture of cardboard boxes; also for the manufacture of busts, stands and shop outfits in general, together with dust and shavings collectors.

PIECE GOODS.—India.—Valabhdas Runchordas & Co., No. 19 Hunum St., Fort, Bombay, India, recently wrote the "Manufacturers' Record" that there is a good opening for piece goods in the market in Bombay in hardware, building material, bicycles, rubber goods, files, wire nails, screws, etc.

MINING MACHINERY.—Belgium.—The Societe Commnoise de Recheutes et d' Exploitation Miniere, Brussels, has been formed to develop some newly-discovered rock salt fields near Beeringen. Offers of machinery might be made to Messrs. A. Habets, Lobet, and H. Forir, who are the consulting engineers.

PNEUMATIC TOOL PLANT.—Scotland.—J. W. Duntley, Pres., Chicago Pneumatic Tool Co., Chicago, Ill., while recently abroad made arrangements for the establishment of a new plant for the manufacture of the company's pneumatic tools at Fraserburg, Aberdeenshire, Scotland, to cost approximately $175,000.

STORAGE PLANTS.—Singapore, Straits-Settlement.—The Singapore Cold Storage Co. is reported to have been formed with a capital of $250,000 for the purpose of erecting cold storage plants at Singapore. The Queensland Meat Export & Agency Co., Brisbane, is understood to be interested in the new concern.

STEAMSHIPS.—London, Eng.—It is reported that the directors of the Cunard Steamship Co. awarded contracts on Dec. 19 to the Fairfield Shipbuilding & Engineering Co., Barrow, for the Vickers-Maxim Co., Barrow, for the construction of two new 25-knot steamships, which are to be subsidized by the government.

COALING JETTIES.—Ceylon.—Reports state that owing to the increasing of the facilities for discharging coal at the new coaling depot, it has been decided to build 18 coaling jetties under the shelter of the North-West breakwater. Each jetty will be 150 ft. in length and 30 ft. in width, and will allow of the berthage of four barges simultaneously.

RAILWAY.—Belgium.—Reports state that the Belgian government has received from an Anglo-American capitalist in London an offer to construct the proposed electric railway between Brussels and Antwerp. The capitalist offers to deposit $10,000,000 as a guarantee of good faith and to finish the line, including the tunnel under the River Rupel, within 18 months.

ELECTRIC ENGINES.—Belgium.—U. S. Consul G. W. Roosevelt at Brussels, reports under date of Nov. 11 that work on the widening of the canal between Brussels and Charleroi is being pushed by the department of public works, and that a new system of mechanical towing of boats by electric engines is under contemplation. Contracts for the same will not be decided on until the latter part of 1903.

ELECTRIC TRACTION SYSTEM.—Christchurch, New Zealand.—The question of establishing an electric traction system in the city of Christchurch, to be operated by water power from the Waimakarvei River, is being considered, and it is stated that the municipality of Christchurch is negotiating with Col. Turretini, the Italian hydraulic power expert, with a view of securing his services in connection with the work.

RAILWAY CONSTRUCTION.—Belgium.—The Societe Nationale des Chemins de Fer Vicinaux, 14 Rue de la Science, Brussels, will receive tenders until Jan. 7 for the construction of the section of railway from Hannut to Verlaine, on the Hannut-Jaureppesur-Meuse line, with a branch to Fexhe-le-Haut-Clocher. The estimated cost of the work is $53,205. M. Pourbaix, Rue des Vingt-Deux, 15 Liege, has plans, etc.

ENGINES, SCREENS, ETC.—London, Eng.—Bids are asked until Jan. 20 for supplying new filth screens and hydraulic engines and gear at the Crossness outfall works, near Erith, County of Kent. G. L. Gomme, Clk. Council, County Hall, Spring Gardens, S. W.——Bids are asked until Jan. 21 by the Agent-General for New Zealand, Victoria St., London, for tramways in the city of Wellington, N. Z. J. R. Palmer, Town Clk.

RAILWAY.—Monterey, Mex.—The Mineral Belt Ry. Co., it is said, will standard gage its road from Monterey to San Pablo and San Pedro mines in the State of Nuevo Leon, Mex.——The Monterey Electric Ry. Co. has been incorporated in Trenton, N. J., with a capital stock of $1,500,000 to operate a street railway in this city. Leroy W. Sperry, Ed. F. Mass and Simon J. Block, Baltimore, Md., are incorporators.

ELECTRICAL EQUIPMENT.—New South Wales, Australia.—O. W. Bain, an electrical engineer, representing the tramways system of the New South Wales Government, arrived in Pittsburg, Pa., Dec. 24, on a visit to the Westinghouse Electric Co., with which company he will place an order for electrical equipment aggregating $2,000,000. The order will include several 9,000-HP. engines, signaling devices and air brakes.

ELECTRIC PLANT.—Mexico City, Mex.—Sir Weetman Pearson & Son, the English contractors, have secured a concession for the establishment of an electric generating plant in the mountains of the state of Puebla, where there is an abundance of water power. It is proposed to establish transmission lines to this city, and to have available 80,000 HP. for electric lighting and industrial purposes. The cost of the proposed work will be something like $12,000,000, gold.

RAILWAY CONSTRUCTION.—Portugal.—The "Diario do Governo" has announced that the date for receiving bids for the construction of the railway from Regua to the frontier has been postponed until Feb. 16. The same journal in a later issue contains a decree granting to M. Paul Blanchod authority to construct a meter gage line, not over 10 kilometers in length, from the mines of Tulhas, in the parish of Cercal, in the Lisbon District, to a point on the island of Pecegueiro, for the conveyance of ores.

RAILWAY.—Spain.—The "Gaceta de Madrid" has announced that a concession has been granted to the San Martin Lieres Gijon Musel Ry. Co. for a period of 99 years for a narrow gage line of railway from Lieres to the Port of Musel, and a branch to Gijon.——A concession has also been granted to the Alicante-Villajoyosa Ry. Co. to build a narrow-gage line between the points named, for a period of 99 years. (Materials are admitted into Spain under special rates of duty.)

RAILWAYS.—Belgium.—We are informed that it has been decided to construct a line of railway from Quievrain, through Hensies, Montreœul-sur-Haine, Pommereœul, Ville-Pommereœul, Herchies, Grand-Glise, Stambruges, Quevaucamps, Elligies, Auhechies, Blicquy, Monlbaix, Ligne and Maintvault; estimated price 1,700,000 francs.——The Belgian Ctate Railway Administration has decided upon the doubling of the Spa-Pepinster line and will announce an adjudication before the end of December of the Spa-Theux section.

BUILDERS' ACCESSORIES.—Birmingham, Eng.—Consul Marshall Halstead, under date of Nov. 18, writes as follows to the Department of State: "A Birmingham business man with connections in other parts of Great Britain writes me he is interested in a company which is being formed in Dublin for the sale of builders' accessories, and he wishes to get into communication with American manufacturers who are willing to appoint agents in Ireland for specialties in the building line. Catalogues and letters on this subject may be sent in my care."

MINING MACHINERY.—France.—A company has been formed at Saint Etienne, France, for the working of newly-discovered zinc, lead and other mines in Tunisie. The directors are Messrs. J. Durleux, Rey-Herme, Aularier. The company's offices are situated at 25 rue Claude Delaroa, St. Etienne, France.——A company has been formed in Brussels for the working of certain tin mines in Portugal. The company is "L'Etain" and its directors are A. Eward, Paris; Alvès da Veiga, Oporto, Portugal, and L. Van Dyck, Ixelles, Brussels, Belgium.

COMPETITION.—Brussels, Belgium.—The "Bulletin Commercial" states that a competition will be held at the Deutsche Seewarte, Hamburg, on April 1, 1903, for the best contrivance for measuring wind pressure. The competition will be open to foreigners, and the prizes to be awarded will be as follows: First prize, about $1,250; second prize, about $750; third prize, about $500. An additional prize of about $750 will be awarded to the contrivance which is adjudged the best after a certain time for trial. Particulars of the competition may be obtained gratis from the Geheime Registratur D., at the office of the Prussian Ministry of Public Works, Berlin.

HYDRAULIC PLANT.—Mexico.—"The International Bureau of the American Republics" states that Manuel Siqueros, a capitalist of Juare, Mex., and Manuel Gameros, a mining engineer of Chihuahua, have purchased the Passasiachic Falls, situated near Ocampo, in the state of Chihuahua, and will construct a large hydraulic plant for the purpose of generating electricity to furnish power for a railway system and for a number of mines and mills in that section. The waterfall which it is proposed to utilize has a sheer drop of 1,800 ft. over a precipice. It is intended to build an electric railway for handling ore, etc., between the town of Minica, at the terminus of the Chihuahau and Pacific Railway, and the mining camps of Altos, Ocampo, Pinos, and Concheno.

RAILWAY.—Ceylon.—Sir J. West Ridgeway, Governor of Ceylon, made the following remarks regarding railway extension on the island at the opening of the Legislative Council on Nov. 11: Now that the railways under construction are approaching completion, we may consider future extensions. Those which first suggest themselves are: The extension of the Kelani Valley Ry. from Avisawella to Ratnapura. The survey of this line will, with your approval, be begun as soon as possible. A light rail-

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

way from Colombo to Negombo and Chilaw, and possibly Puttalam. An offer has been made by an English syndicate for the construction of a road railway with electric traction, and is under consideration. A committee will be appointed to consider the question. The construction of a railway to Trincomalee, which would serve Batticaloa.

RAILWAYS.—Natal.—Reports state that the approaching general election in Natal is hinging on railway policy. There are two schemes, one favored by the government and the other by the opposition. Both are based on the hypothesis that further railway facilities will be required in the Rand. The government scheme is to double the present main line between Durban and Ladysmith, while the opposition advocates an alternative and more direct line from Durban to Waschbank station, below Glencoe Junction. A third project is for a line from Pietermaritzburg through Zululand and the newly acquired territory to Ermelo, joining an eventual line from the Rand to Delagoa Bay. The controversy seems to regard mainly local interests, both parties pledging themselves to spend some $25,000,000 apart from the urgency and wisdom of the schemes.

RAILWAY.—Mexico City, Mex.—A contract has been signed by the Mexican Central Ry. and the Mexican Government for the extension of the Mexico-Cuernavaca & Pacific R. R., which was recently acquired by the former company, from its present southern terminus to the Pacific Coast of this country. The terms of the contract require that the proposed extension shall be built from Organal, near the Balsas River, either to Zihuatanejo or to Acapulco. If the Zihuatanejo route is chosen a branch line must be constructed to Chilpancingo, and the company may also build a branch line from Zihuatanejo along the coast southward to Acapulco. The subsidy is a little over $23,000 per kilometer for the main line, payable in bonds of the 5% interior redeemable debt at par. None of the branches which the company either must of may build carrier a subsidy. The trunk line must be completed by Dec. 31, 1902.

CONTRACT PRICES.

WATER PIPE.—Chicago, Ill.—The following bids were received by Frank Murphy, Contract Clk., 222 City Hall, on Dec. 11 for furnishing, 4-in., 6-in. 8-in. and 12-in. cast-iron water pipe: J. B. Clow & Sons, Lake and Franklin Sts., $35.70 per ton; U. S. Cast-Iron Pipe & Foundry Co., The Rookery, $34.80.

NAVIGATION PASS TRESTLES.—Wheeling, W. Va.—The following bids were received on Dec. 12, 1903, for furnishing the navigation trestles for Dam No. 5, Kanawha River; trestle complete, 45,000 lbs.: Chas. Hegewald Co., New Albany, Ind., 6.999 cts. a lb.; Ellicott Machine Co., Baltimore, Md., 8.45 cts.; New Jersey Foundry & Machine Co., New York, 8.47 cts.; Gorham D. Williams, Charleston, W. Va., 7.2 cts.; The Gallipolis Foundry & Machine Co., Gallipolis, O., 7.5 cts.; B. Wallis & Co., Baltimore, Md., 6.5 cts.

STREET REPAIRS.—New York, N. Y.—The following bids were received by the President of the Borough of Manhattan on Dec. 16 for re-regulating, regrading, reflagging and recurbing Edgecombe Ave., from 147th St. to 154th St.:

Bids Received at New York, N. Y., Dec. 16, 1902, for Making Repairs to Edgecombe Ave.

Bidder.	Fill, 40,700 yds.	Masonry, 2,700 yds.	Iron fence, 100 ft.	Curb New, 1,500 ft.	Curb Old, 2,100 ft.	Flag New, 5,600 ft.	Flag Old, 9,000 ft.	Total.
Anthony Kelly, 215 West 125th St.	$0.50	$7.50	$4.50	$1.00	$0.35	$0.35	$0.20	$47,045
Consetto Marrone, New York	.12	5.40	4.00	.70	.19	.21	.03	22,759
P. J. Moran, New York	.30	8.50	5.00	.80	.25	.25	.04	39,145
A. J. Collins, 166th St. and Webster Ave.	.40	4.25	1.00	.80	.30	.23	.04	31,333
Norton & Dalton, 215 West 125th St.	.62	4.90	3.50	.80	.20	.25	.10	42,734
F. Thielmann, Jr., 147 East 125th St.	...	9.00	25.00	.80	.50	.24	.05	30,844

WATER PIPE.—Providence, R. I.—The following bids were received by the department of public works on Dec. 26, 1902, for supplying cast-iron water pipe: U. S. Cast-Iron Pipe & Foundry Co., 260.41 tons of from 4 to 8-in. pipe, $35.90 per ton; 205.63 tons of from 12 to 24-in., $34.80; time to complete, 60 days; Camden Iron Works, Camden, N. J., 466.04 tons, from 4 to 24-in., $33.50; 30 days; Warren Foundry & Machine Co., 160 Broadway, New York, 466.04 tons, from 4 to 24-in., $32.70 per ton; 30 days (accepted).

ROAD.—San Juan, P. R.—The following bids were received by the superintendent of public works of Puerto Rico, San Juan, on Dec. 17 for the construction of 14.5 kilos. of the Bayamon-Comerio road; contract awarded Mullenhoff & Korber, San Juan:

Bids Received at San Juan, P. R., Dec. 17, 1902, for Constructing a Road.

Quantities.		Andres G. Canton, Naranjito.	Roque Pan-iagua, San Juan.	Jose Gonzalez Padin, San Juan.	Giles & Marix, San Juan.	Mullenhoff & Korber, San Juan.
Excavation, all material not classified	120,000 cu. meters.	$0.17	$0.25	$0.20	$0.40	$0.24
Excavation, in water	500 " "	.25	.40	1.20	1.00	.30
Broken stone macadam	14,500 " "	2.46	2.50	3.00	2.00	2.22
Screenings	1,450 " "	1.00	1.00	1.50	2.00	1.00
Third-class masonry	4,500 " "	9.00	8.00	7.95	8.50	7.00
Retaining wall, laid dry	400 " "	4.00	3.00	4.00	3.50	2.50
Paving grouted	400 sq. "	2.00	.75	1.40	2.50	1.50
Concrete	225 cu. "	9.00	10.00	11.00	15.00	9.00
Concrete drain pipe 78-cm. diameter	85 " "	10.00	20.00	11.00	20.00	10.00
Concrete drain pipe 60-cm. diameter	40 " "	10.00	20.00	11.00	20.00	10.00
Weel guards stone	210 each	3.00	3.00	2.50	5.00	2.50
Total		$104,450	$110,780	$112,585	$127,975	$99,490
Time to complete		12 mos.	14 mos.	8 mos.	.....	12 mos.

TUNNEL LINING.—Paterson, N. J.—The following bids were received by the Jersey City Water Supply Co., Edlow W. Harrison, Ch. Engr., on Dec. 22, for brick lining of the tunnel at Hook Mountain, as follows: (1) 8-in. lining, (2) 12-in. lining: James B. Hall, Jersey City, (1) $18.24 per lin. ft., (2) $21.24; G. H. Bouton, Jersey City, (1) $10.58, (2) $13.52; Abbot Gamble Construction Co., Times Bldg., New York, (1) $62.37, (2) $70.

HARBOR IMPROVEMENTS.—Newport, R. I.—The following bids were received by Maj. G. W. Goethals, U. S. Engrs., for harbor improvements, etc.: For improving Newport Harbor—Chas. M. Cole, Fall River, 34⅞ cts. a cu. yd. for dredging; $18 a cu. yd. for removing boulders; J. S. Parker Dredging Co., Providence, 37 cts. for dredging and $15 for removing boulders. About $35,000 is available for this work. For improving the harbor at Great Salt Pond, Block Island—Dredging: C. H. Latham Dredging Co., Hartford, 26.7 cts. a cu. yd.; J. P. Randerson, Albany, 34 cts.; jetty construction, E. S. Belden & Sons, Hartford, $1.23 per ton. $32,000 is available for extending jetties and $12,000 for dredging in new harbor. Harbor of refuge, old harbor, Block Island—repairs to breakwater, E. S. Belden & Sons, Hartford, Ct., $2.17 a ton.

DREDGING.—San Francisco, Cal.—The following bids for the dredging and widening of the Oakland Harbor, from the harbor to the tidal canal, have been received. The contract calls for widening of the channel from harbor as far as Chestnut St., from 300 to 400 ft., for dredging the Chestnut St. channel and for the completion of the Brooklyn channel and Alameda channel: Atlantic, Gulf & Pacific Co., San Francisco, 10.45 cts. per cu. yd.; Waren H. Pomeroy, San Jose, 8.44 cts.; Raymond A. Perry, San Francisco, 9.80 cts.; West Coast Dredging Co., 13.50 cts.; Pacific Coast Dredging & Reclamation Co., 12.90 cts.

PAVING.—Baltimore, Md.—Bids have been received as follows by the municipal board of award for paving Northwest St., between Fulton Ave. and Payson St.: The Filbert Paving & Construction Co., per sq. yd., $2.25; D. Sullivan, $1.97; Owen Patterson, $2.34.

ASPHALT PAVING, ETC.—Fort Dodge, Ia.—The following bids were received by C. H. Reynolds, Cy. Engr., Fort Dodge, on Dec. 17, for paving with Trinidad asphalt, and for laying combined curb and gutter. The work was let in two contracts, the Barber Asphalt Paving Co., Chicago, receiving both awards: (1) is for 12,356 sq. yds. Trinidad asphalt (2) for 6,928 lin. ft. combined curb and gutter, (3) extra excavating, (4) 17,500 yds. Trinidad asphalt, (5) 9,700 ft. combined curb and gutter, (6) extra excavating: Barber Asphalt Paving Co., (1) $1.99 per yd., (2) 70 cts. per lin. ft., (3) 35 cts. per cu. yd., (4) $1.99, (5) 70 cts., (6) 35 cts.; Standard Paving Co., Chicago, (1) $2.15, (2) 76 cts., (3) 30 cts., (4) $2.15, (5) 76 cts, (6) 30 cts. Total cost of asphalt paving, $59,413; total cost of curbing and gutter, $11,640.

LUMBER.—Modesto, Cal.—The following bids were received by the Directors of the Modesto Irrigation District for the lumber work in a finished condition for the construction of bridges, drops, railway crossings, head gates, etc.; (1) redwood, (2) Oregon pine: M. A. Jenkine, Sacramento, (1) $31.95 per M ft., (2) $25.88 per M ft.; M. B. White, Stockton, (1) $55, (2) $45; Healey, Tibbitts & Co., San Francisco, (awarded contract) (1) $46, (2) $36; San Francisco Bridge Co., (1) $75, (2) $60; Alfred Burrell, San Francisco, lumber not specified, $46; concrete work, $17.50 per cu. yd.; syphon pipe for crossings at $15 per ft.; Pacific Bridge Co., (1) $61.30, (2) $57.30.

GRANITE BLOCKS.—Galveston, Tex.—The following bids were received by Capt. C. S. Riche, U. S. Engr., on Dec. 10 for furnishing about 40,000 tons of granite blocks, weighing from 5 to 10 tons each, for the Galveston south jetty: Isaac Heffron & Co., Galveston, $3.05 per ton; Parker, Washington & Co., Kansas City, Mo., $2.79; Chas. Clarke & Co., Galveston, $2.99.

BRICK PAVING.—Tipton, Ind.—The following bids were received early last month for paving the Boulevard with brick; (1) brick paving on 4-in. concrete and 2-in. sand cushion, a sq. yd.; (2) curb, a lin. ft.; (3) resetting old curb, a lin. ft.; (4) grading, a cu. yd.; (5) extra concrete a cu. yd.; (6) extra gravel a cu. yd.; (7) extra broken stone a cu. yd.; (8) extra sand; (9) furnishing and laying subdrain tile a ft.; (10) furnishing and putting in oak plank per 1,000 ft.: Fuller Bros., Muscatine, (1) $1.68, (2) 48 cts., (3) 10 cts., (4) 30 cts., (5) $7, (6) $1.50, (7) $2, (8) $1.50, (9) 10 cts., (10) $36; Snouffer & Ford, Cedar Rapids (awarded contract), (1) $1.65, (2) 48 cts., (3) 10 cts., (4) 29 cts., (5) $6, (6) $1.25, (7) $1.50, (8) $1.25, (9) 15 cts.:

TRAINING DIKES.—Savannah, Ga.—Bids were received by Capt. C. E. Gillette, U. S. Engrs., on Dec. 22 for building training dikes in Savannah River, near Augustus, Ga. The amount available is $58,000. It is recommended that the bids be rejected. (1) piling, 110,000 lin. ft.; (2) pile driving, 57,000 ft.; (3) waling pieces and cross ties, 32,000 ft., B. M.; (4) wire spikes, 3,000 lbs.; (5) brush bundles, 39,000 cu. yds.; (6) riprap stone, 9,500 cu. yds.; (7) iron wire, 2,500 lbs.; (8) mattress weaving, 4,300 cu. yds.; (9) bank grading; (10) total: Joseph Evins, Dardanelle, Ark., (1) 4½ cts. per lin. ft., (2) 8 cts., (3) $25 per M ft., (4) 5 cts. per lb., (5) 56 cts. per yd., (6) $2.15 per cu. yd., (7) 5 cts. per lb., (8) 75 cts. per cu. yd., (9) 15 cts. per cu. yd., (10) $56,075; Albert J. Twiggs, Augusta, Ga., (1) 4½ cts., (2) 8 cts., (3) $30, (4) 10 cts., (5) 60 cts., (6) $2.25, (7) 10 cts., (8) 75 cts., (9) 15 cts., (10) $59,020.

INDUSTRIAL NOTES.

THE NEW ENGLAND STRUCTURAL CO. has moved its Boston office from Post Office Square to the new building at 110 State St., Boston.

THE CHICAGO PNEUMATIC TOOL CO., Chicago, will hold a meeting of its representatives on Jan. 5 at its offices at 1010 Fisher Bldg., Chicago.

THE ALBERT & J. M. ANDERSON MFG. CO., Boston, Mass., has recently completed a contract and made shipment of a quantity of trolley wire to South Africa.

THE MINE & SMELTER SUPPLY CO., 155 Washington St., New York, is said to have recently secured a contract for a 100-ton cyanide plant for Chihuahua, Mex.

THE CENTRAL PIPE, VALVE & CONSTRUCTION CO. has been formed as a reorganization of the Central Pipe & Valve Co., of Allegheny, Pa. The capital stock is $100,000. W. D. Corcoran is Pres.

THE WESTINGHOUSE ELECTRIC & MFG. CO. is said to have been awarded a contract by the Brooklyn Elevated Ry. for the equipment of all its trains with the Westinghouse electro-pneumatic control.

J. HOLT GATES & COMPANY, Contracting Engrs., Chicago, have removed their offices to 927 Monadnock Bldg., where they will continue the business of handling complete installations of electric and steam plants.

THE U. S. CAST IRON PIPE & FOUNDRY CO., New York, has completed its contract for furnishing the Borough of Brooklyn, New York, with some 18 miles of 4-ft. water mains. The contract price was about $700,000.

THE AUSTIN MFG. CO. is the new name of the F. C. Austin Mfg. Co., Chicago, the change of name having been decided on by the stockholders of the last named company on Sept. 24. The company has offices in the Manhattan Bldg., Chicago.

H. A. STREETER, Chicago, has disposed of his interest in the structural iron work to the Globe Iron & Wire Works, and is now manufacturing his patented steel clips, metallic window frames and sash and other specialties at 31-33 Indiana St., Chicago.

THE GEO. H. HAMMOND CO., Chicago, has placed with the American Blower Co., of Detroit, Mich., an order for 16 large steel plate fans, two of them with direct-connected engines for induced draft work, the others for use in connection with cold storage plant.

THE M. GARLAND CO., Bay City, Mich., manufacturers of sawmill machinery, has recently received orders from Mack Dickinson, Tower, Mich., for some equipment, and has completed an extensive repair job on W. D. Young & Co.'s hardwood sawmill, Bay City.

F. G. COBURN & CO., Contractors, Boston, Mass., have made an assignment, with liabilities amounting to $150,000, assets estimated at $62,000. The company is at present building two hospitals for the city, a school house for Cambridge and two shops at the Charlestown Navy Yard.

THE RHODE ISLAND CONCRETE CO., Providence, R. I., is now completing a moisture-proof floor in the drill room at the U. S. Naval Training Station, Coasters Harbor Island, Newport, R. I. The room measures 350 x 65 ft. The surface was covered to a depth of 2 ins. with coal tar-concrete, into which was embedded hard pine planking.

THE BUFFALO SPRING & GEAR CO., manufacturers of light vehicles, of Buffalo, N. Y., has applied to the Supreme Court for the appointment of a receiver. The liabilities are placed at $314,912, the nominal assets at $387,977, and the assets under forced sale appraised at $203,139.

SNARE & TRIEST, Contracting Engrs., were incorporated on Dec. 17 under the laws of the State of New York, with a capital stock of $600,000. The directors are Fred. Snare, W. G. Triest, New York city, and H. M. Dunn, Dongan Hills, S. I. The purpose of the incorporation was to increase the firm's facilities for handling its growing business.

THE LEBANON CHAIN WORKS, Lebanon, Pa., has received an order from the New York Ship Building Co., Camden, N. J., for 44 pieces of 15 fathoms each 3⅛-in. stud link anchor chain for vessels No. 5 and 6, now under construction. The chain will weigh approximately 560 lbs. to the fathom, and will have a sufficient strength to meet the required breaking test of 482,160 lbs.

A. M. CRANE & CO., Iron and steel merchants, Rookery Building, Chicago, inform us that Mr. R. R. Shuman has been made Assistant Secretary and will develop the company's out-of-town business by means of advertising, correspondence and mail-order methods. For the past two or three years Mr. Shuman has been advertising manager for Jos. T. Ryerson & Son, of Chicago, and editor of that firm's monthly publication.

THE LOCKE STEEL BELT CO., Bridgeport, Conn., elected the following directors for the ensuing year on Dec. 2: F. R. White, White Sewing Machine Co., Cleveland, O.; T. B. Little, Citizens' Saving & Loan Asso., Cleveland, O.; J. R. Rand, Pres. Rand Drill Co., New York; J. A. Beeber, Pres. First National Bank, Williamsport, Pa.; A. R. Bole, Pres. Vieillard & Osswald, Brooklyn, N. Y.; C. C. Woolworth, Pres. Fort Orange Paper Co., Albany, N. Y.; M. McVoy, Jr., Pres. Locke Steel Belt Co., New York; S. D. Locke, Secy. and Treas. Locke Steel Belt Co., Bridgeport, Conn.; L. B. Ball, Genl. Mgr. Locke Steel Belt Co., Bridgeport, Conn.

THE NEW YORK CONTINENTAL JEWELL FILTRATION CO. report that they have closed a contract with the Maharaja of Mysore, India, through Capt. A. J. de Lotbiniere, Royal Engineers, English Army, who was sent from India to New York by his government for that purpost, for a filter plant to be located at Bowrinpet, in the Kolar Gold Fields, near Bangalore, Mysore. The plant will consist of four Jewell gravity filters, each 20 ft. in diameter, constructed of granite laid in Portland cement. There will be a masonry subsidence basin holding 400,000 imperial gallons. The capacity of the filter plant is to be 2,600,000 U. S. gallons. It will be erected early in the spring by one of the filter company's engineers. E. B. Weston is Consult. Engr.

NEW COMPANIES.—Minn. Tel. & Telg. Co., Mankato, Minn.; $100,000; J. H. James.

Automobile Co. of Washington, D. C., 127 Market St., Camden, N. J.; $100,000; W. C. Koller, A. L. Cline, R. H. Shindel.

Newark Mining & Milling Co.; $500,000; C. M. Perry, Rockland, Mass; J. H. Stuart, Boston, Mass.

New York Combustion Co., 259 Washington St., Jersey City, N. J.; heaters, furnaces, etc.; $1,000,000; W. S. Feneado, Carlyle Garrison, J. McTiernan.

Johnston Calking & Sole Stretching Machine Co., Kittery, Me.; tools, machinery and implements; $100,000; Charles C. Smith, B. E. Smith.

Taviche Mining & Milling Co., New York, N. Y.; $500,000; A. A. Sprague, Chicago; J. C. Breckinridge, New York; H. N. Emmons, Ocottau, Mexico.

Wood-Harmon Co., New York city; construct buildings, railroads, docks, etc.; $2,000,000; Wm. E. Harmon, New York city; R. H. Lee Martin, Larchmont, N. Y.

Laura Lee Mining Co., Cripple Creek, Mich.; $500,000; C. W. Knox; C. W. Harris, A. McComas.

United Gold Mines, Drainage & Tunnel Co., Denver, Colo.; $50,000; J. L. Drumbeller, F. R. Anson, H. H. Mund.

Racine Mining, Milling & Power Co., Racine, Wis.; $1,500,000; W. A. Sanders, B. R. Adams, B. F. Burner.

Novelty Motor & Engineering Co., 15 Exchange Pl., Jersey City, N. J.; motors, engines, etc.; $100,000; Horace S. Gould, F. K. Seward, K. K. McLaren.

Cleveland Automatic Machine Co., East Orange, N. J.; screw machines; $1,000,000; Geo. H. Kelly, Geo. G. Whitcomb, J. G. Russell.

Information concerning contracts to be let or of supplies to be purchased, and corrections of errors and omissions in published items, are invited.

PUBLICATIONS RECEIVED.

LIGHT RAILWAY CONSTRUCTION.—By Richard Marion Parkinson, Assoc. M. Inst. C. E. London and New York: Longmans, Green & Co. Cloth; 6 × 9½ ins.; pp. 244; 85 illustrations in the text. $4.

THE SEA COAST.—(1) Destruction. (2) Littoral Drift. (3) Protection. By W. H. Wheeler, M. Inst. C. E. London and New York: Longmans, Green & Co. Cloth; 6 × 9½ ins.; pp. 361; one plate and 38 illustrations in the text. $4.50.

CALCULATIONS IN HYDRAULIC ENGINEERING.—A Practical Text-Book for the Use of Students, Draftsmen and Engineers. Part II, Calculations in Hydro-Kinetics. By T. Claxton Fidler, M. Inst. C. E., Professor of Civil Engineering, University College, Dundee, University of St. Andrews. London and New York: Longmans, Green & Co. Cloth; 6 × 9½ ins.; pp. 203; 50 illustrations in the text. $3.

THE HOW AND WHY OF ELECTRICITY.—A Book of Information for Non-Technical Readers. By Charles Tripler Child. New York: Electrical Review Publishing Co. Cloth; 5 × 8 ins.; pp. 127; 40 illustrations in the text. $1.

A NEW SYSTEM OF HEAVY GOODS TRANSPORT ON COMMON ROADS.—By Bramah Joseph Diplock. London and New York: Longmans, Green & Co. Cloth; 6 × 9½ ins.; pp. 116; 27 illustrations. $2 net; by mail, $2.11.

ECONOMICS OF FORESTRY.—A Reference Book for Students of Political Economy and Professional and Lay Students of Forestry. By Bernhard E. Fernow, L.L. D., Director of the New York College of Forestry, Cornell Universtiy. New York: Thomas Y. Crowell & Co. Cloth; 5 × 8 ins.; pp. 520; tables. $1.50 net; by mail, $1.65.

WHO'S WHO IN AMERICA.—A Biographical Dictionary of Notable Living Men and Women of the United States. Edited by John W. Leonard. Chicago: A. N. Marquis & Co. Cloth; 6 × 8 ins.; pp. 1394. $2.75.

A MUNICIPAL PROGRAM.—Pamphlet No. 7 of the National Municipal League. By Horace E. Deming. Reprinted from the Annals of the American Academy of Political and Social Science. Paper; 6 × 9 ins.; pp. 15. Philadelphia: National Municipal League.

CHAMBER OF COMMERCE, PERTH WESTERN AUSTRALIA.—Report for 1901-2. J. Fairfax Conigrave, Secretary. Paper; 5 × 9 ins.; pp. 64; tables.

BACTERIAL TREATMENT OF CRUDE SEWAGE.—Fourth Report on Experimental Treatment of London Crude Sewage. By Prof. Frank Clowes, Chief Chemist to the London County Council. London: P. S. King & Son. Paper; 8 × 13 ins.; pp. 150; tables. $1.20.

THE DIAMOND MINES OF SOUTH AFRICA.—Some Account of Their Rise and Development. By Gardner F. Williams, M. A., General Manager of De Beers Consolidated Mines. New York and London: The Macmillan Co. Cloth; 7 × 10 ins.; pp. 681; maps, photogravures and many other illustrations. $10 net.

MY LIFE IN MANY STATES AND FOREIGN LANDS.—Dictated in My Seventy-Fourth Year. By George Francis Train. New York: D. Appleton & Co. Cloth; 5 × 8 ins.; pp. 348; eight illustrations. $1.25 net; by mail, $1.37.

THE COMING CITY.—By Richard T. Ely, Director of the School of Economics and Political Science in the University of Wisconsin. New York: Thomas Y. Crowell & Co. Cloth; 5 × 7½ ins.; pp. 110. 60 cts. net.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

STEAM PUMPS AND AIR COMPRESSORS.—Reliance Machine Tool Works, St. Louis, Mo. Paper; 3 x 5 ins.; pp. 40.

This catalogue includes single and compound duplex pumps, accelerated valve movement pumps for boiler feed and general service, hydraulic and mine pumps, and deep-well pumping engines. Some 40 of the latter are in use in the Beaumont oil fields. Air pumps for breweries and other light pressure service, and air compressors are also included.

EXPANDED METAL FIREPROOF CONSTRUCTION.—The Expanded Metal Fireproofing Co., Old Colony Building, Chicago. Paper; 9 × 12 ins.; pp. 64; illustrated.

This handsome publication is composed almost entirely of half-tone engravings of hotels, office buildings, public buildings, etc., in which expanded metal has been used for such work as floors, walls, partitions, etc. There is no explanation as to the character or extent of the work in the various buildings.

AIR BRAKES.—Christensen Engineering Co., Milwaukee, Wis. Paper; 6 × 9 ins.; pp. 57; illustrated.

The well-known Christensen "straight-air" equipments, popular for electric railway cars, are shown in detail, all the apparatus being described and its advantages pointed out. A handsome pamphlet, 9 × 6 ins, in size, of 50 pages, was distributed at the recent convention of the American Street Ry. Association at Detroit; the pamphlet shows views of the company's works and gives a list of the roads using the brakes, with views of cars carrying the equipment.

ROGERS COST SYSTEM.—W. S. Rogers, Keene, N. H. Paper; 5¼ × 6½ ins.; pp. 32; illustrated. 10 cts.

In this little pamphlet are given numerous valuable hints relative to keeping accounts so that the cost of each item of work or materials may be readily ascertained. Sample forms are given of some ten or more cards upon which the various entries are to be made, together with a detailed explanation of the use of such cards. The pamphlet should be of use to every contractor or manufacturer who has not already an effective system of ascertaining the cost of every item of his work.

PAINTS AND STAINS.—Heath & Milligan, Chicago, Ill. Four pamphlets as follows: 6 × 9 ins., pp. 30; 7¾ × 7 ins., pp. 12; 5 × 7½ ins., pp. 91; 4½ × 6½ ins., pp. 87.

The first of these pamphlets describes and gives color cards of paints for general purposes; the second describes and gives results of tests of special paints for structural steel; the third is a catalogue and price-list of paints and painters' tools and supplies, and the fourth contains instructions and rules for selecting and applying paints for various purposes. The last pamphlet is an exceedingly practical and useful little book and is well worth securing by engineers for their pamphlet libraries.

POCKET DIARY FOR 1903. 2½ × 4 ins.; leather.

The firm of J. Jacob Shannon & Co., of 1744 Market St., Philadelphia, dealers in contractors' supplies, are sending free on request a pocket diary for 1903. Accompanying each diary is a $100 accident insurance policy, covering the risk of the user of the diary to death by accident during the year 1903 while a passenger on a railway car, steamboat or other public conveyance. Inasmuch as statistics show that the actual risk of death by accident which a railway passenger suffers is exceedingly small, the actual cost of the insurance policy is doubtless much less than might appear at first sight. It is, however, a unique and effective way to advertise.

PUMPING MACHINERY AND TURBINES.—Edward C. Hart & Co., 50 Dearborn St., Chicago. Paper; 5½ × 8½ ins.; pp. 31; illustrated.

This pamphlet describes a system of multiple centrifugal pumps and blowers, each wheel having the effect of a separate pump, so that it is claimed fan wheels will give four times the pressure for a given number of revolutions per minute than any other centrifugal pump of the same diameter. The apparatus can be applied to deep wells, the wheels being set at different depths in the well. Hydraulic turbines, an air-lift pumping system, a special condensing system, and a live steam and exhaust engines and electric dynamos and motors are also included.

UNDERGROUND WIRE ROPE HAULAGE.—By William E. Ralfe, for the Broderick & Bascom Rope Co., St. Louis, Mo. Paper; 9 × 12 ins.; pp. 22; illustrated.

In this handsome pamphlet the use of the tail-rope system of hauling in the workings of the Coal Valley Mining Co., at Sherrard and at Cable, Ill., is described and illustrated. Detailed plans of the two mines are given, showing the arrangement of the tail-rope system, and numerous photographs show the actual working of the plant at various points. A comparison of cost of haulage by mules and by the tail-rope closes the discussion; but the author greatly overestimates the cost of mule haulage, making it 12 cts. a ton mile, whereas ordinarily half as many drivers at half the pay assumed would handle the 1,000 tons of coal daily with the haul of 1¼ miles assumed.

The allowance of $2 a day for repairs of a tail-rope plant costing $7,400 is exceedingly low.

The tail-rope system needs no exaggerations to establish its merits.

ELECTRICAL MACHINERY.—Fort Wayne Electric Works, Ft. Wayne, Ind. Paper; 8 × 10½ ins., 4½ × 6½ ins., 3½ × 6⅝ ins.; illustrated.

The larger pamphlets are regular bulletins of this company's series. They treat of the following subjects: Bulletin No. 1025, direct-current belted generators; the construction is described in detail and tables of dimensions, etc., given. No. 1028, enclosed direct-current arc lamps. No. 1029, enclosed direct-current 110-volt arc lamps; these are of the multiple type, for use on incandescent circuits, while the preceding bulletin refers to multiple-series lamps, to be used on power circuits. No. 1030 describes the construction of single-phase generators, giving also dimension tables. No 1032 shows direct-current motors, with belt connection, also with tables; similarly, No. 1036 shows small direct-current motors. Nos. 1034 and 1035 refer to switchboard work, the former showing switching panels for small motors, giving prices for same, and the latter showing electrostatic ground detectors, with prices and connection diagrams. The smaller pamphlet is an instruction book for Wood measuring instruments, while the small flyer advertises Wood oil transformers.

Mail Delivery Notice.

The first pages of Engineering News go to press on Monday each week, and the last pages, including "Wants," "Proposals" and "For Sale" cards, about Wednesday noon. All papers for Boston, Philadelphia, and Greater New York should be received **Thursday morning.** All places East of the Mississippi should be reached by Friday afternoon.

If your paper is not received promptly, make a complaint in writing to your local post-office officials. This will cause an investigation, and the complaint will finally reach the office where the delay occurs.

STEAM SHOVEL OUTFITS.

2,500,000 YARDS EXCAVATION.

The undersigned has in charge the recontracting of 17 miles of Double-track Railroad Construction, from 23 to 40 miles from Cincinnati. Most of it very heavy work. Portions of it has considerable loose rock. To be completed before Dec. 1, 1903. The work can be cut up into ten or more sections to suit the outfit. Sixty-pound rails and frogs free. Transportation on outfit free from St. Louis, Chicago, Cleveland, and intermediate points, as agreed.

Correspondents can have profile mailed them for inspection and retufn. This work can now be inspected and further information given by calling on,

H. M. STRONG,
51-3t Hotel Sterling, Cincinnati, O.

U. S. ENGINEER OFFICE, Newport, R. I., Dec. 26, 1902.—Sealed proposals for breakwater construction at Point Judith, R. I., will be received here until 11 a. m., Jan. 30, 1903, and then publicly opened. Information furnished on application. GEO. W. GOETHALS, Maj., Engrs. 1-4t

OFFICE WASHINGTON AQUEDUCT, 2728 Pennsylvania Ave., Washington, D.C., Dec. 29, 1902.—Sealed proposals for filters, pure water reservoir and appurtenances, and cement, will be received here until 12 m., Jan. 28, 1903, and then publicly opened. Information on application. A. M. MILLER, Lieut.-Col., Engrs. 1-4t

U. S. ENGINEER OFFICE, St. Augustine, Fla., Dec. 26, 1902.—Sealed proposals for dredging in St. John's River, Fla., or for hire of dredging plant, will be received here until 12 noon, Jan. 26, 1903, and then publicly opened. Information furnished on application. FRANCIS R. SHUNK, Capt., Engrs. 1-4t

DRAINAGE LETTING.

Walnut, Ill., Dec. 22, 1902.

The Commissioners of Union Drainage District No. 1 will receive proposals for enlarging the Main Ditch, in their district, up to noon Jan. 8, 1903. Yards of excavation, 635,000.

C. B. KEIGWIN,
JAMES FOLEY,
J. W. CASHNER,
Commissioners.

P. C. KNIGHT, Engineer.

Address all communications to M. A. Stiver, Attorney, Walnut, Ill. 1-1t

SEALED PROPOSALS will be received on or before Feb. 1, 1903, for the construction, per approved designs and specifications, to be submitted by contractor of Bridge St. Viaduct, Jacksonville, Fla.; said bridge to be preferably of concrete-steel construction and will be approximtely 840 ft. long, and 60 ft. in width, divided in spans, as follows: One 128 ft., concrete; two 112 ft., concrete; one 96 ft., concrete; one 56 ft., concrete; one 45 ft., steel; four 43 ft., steel. The right is reserved to reject any and all bids. For general plan and further information address E. B. PLEASANTS, Chief Engineer, Atlantic Coast Line Railroad Co., Wilmington, N.C.; PHILIP AYLETT, Bridge Engineer, Seaboard Air Line, Portsmouth, Va. 1-1t

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., Dec. 23, 1902.—Sealed proposals will be received at this office until 2 o'clock p. m. on the 27th day of January, 1903, and then opened, for furnishing the low-pressure Steam Heating Apparatus, etc., complete in place, for the U. S. Post Office at Creston, Ia., in accordance with drawings and specifications, copies of which may be had at this office or at the office of the Superintendent at Creston, Ia., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1-2t

U. S. ENGINEER OFFICE, Buffalo, N. Y., Dec. 22, 1902.—Sealed proposals for channel and basin excavation in Lake Erie Entrance to Black Rock Harbor and Erie Basin at Buffalo, N. Y., will be received here until 11 a. m., January 22, 1903, and then opened. Information furnished on application. T. W. SYMONS, Major, Engrs. 52-4t

U. S. ENGINEER OFFICE, Newport, R. I., Dec. 11, 1902.—Sealed proposals for Dredging and for constructing Jetties at Nantucket Harbor, Mass., will be received here until 11 a.m., Jan. 15, 1903, and then publicly opened. Information furnished on application. GEO. W. GOETHALS, Maj., Engrs. 51-4t

U. S. ENGINEER OFFICE, Duluth, Minn., Dec. 15, 1902.—Sealed proposals for building Pier Extension and additional superstructure at Grand Marais, Mich., will be received here until noon, Jan. 15, 1903, and then publicly opened. Information on application. D. D. GAILLARD, Capt., Engrs. 51-4t

CONSTRUCTING QUARTERMASTER'S OFFICE, Custom House and Post Office Building, Chattanooga, Tenn., Dec. 22, 1902.—Sealed proposals in triplicate will be received here until 12 noon, Jan. 22, 1903, for Constructing, Plumbing, Heating and Gas Piping brick hospital building at new Military Post in Chickamauga Park, near Chattanooga, Tenn. U. S. reserves right to accept or reject any or all proposals. Plans, specifications and instructions to bidders may be seen here or at Room 399, War Department, Washington, D. C. BIDS WILL BE RECEIVED ONLY AT THIS OFFICE. They should be plainly marked, "Bids for Hospital at Chickamauga Park," addressed H. J. SLOCUM, Capt. Cav. Q. M. 52-4t

IMPROVEMENT DELAWARE RIVER.—U. S. Engineer Office, Philadelphia, Pa., Dec. 29, 1902.—Sealed proposals for constructing bulkhead in Delaware River, between Edgemoor and mouth of Christiana River, will be received here until 12 noon, Jan. 29, 1903, and then publicly opened. Information furnished on application. C. W. RAYMOND, Lieut.-Col., Engrs. 1-4t

SEWERS.

Office of the Sewerage & Water Board,
602 Carondelet St.,
New Orleans, La., Nov. 17, 1902.

Sealed proposals will be received until 12 m. Monday, Feb. 2d, 1903, for the construction of approximately 96 miles of Sewers and appurtenances, of which 7 miles will be brick or concrete sewers from 72 to 27 ins. in diameter, laid from 10 to 24 ft. in depth, and 89 miles will be pipe sewers, from 36 to 8 ins. in diameter, laid from 5 to 20 ft. in depth. There will be approximately 1,100 manholes and 450 flushtanks.

The above work will be divided into eight contracts, and certified checks ranging from $1,500, on the smallest, to $5,000 on the largest contract, must be deposited prior to the submission of their bid by contractors bidding on any contract.

A surety company bond for an amount equal to 25% of the gross amount of each contract will be required of the successful bidder in each case.

Specifications, general plans and blank forms of proposals may be obtained at the office of the Board. After Dec. 15th, 1902, plans and specifications can also be seen at the office of Hering & Fuller, Consulting Engineers, No. 170 Broadway, New York.

The right is reserved to reject all bids.

F. S. SHIELDS,
Temporary Secretary.
GEO. G. EARL,
General Superintendent. 48-10t

REINHARDT'S
"Technic of Mechanical Drafting."
A thoroughly practical book. Price, $1.00.